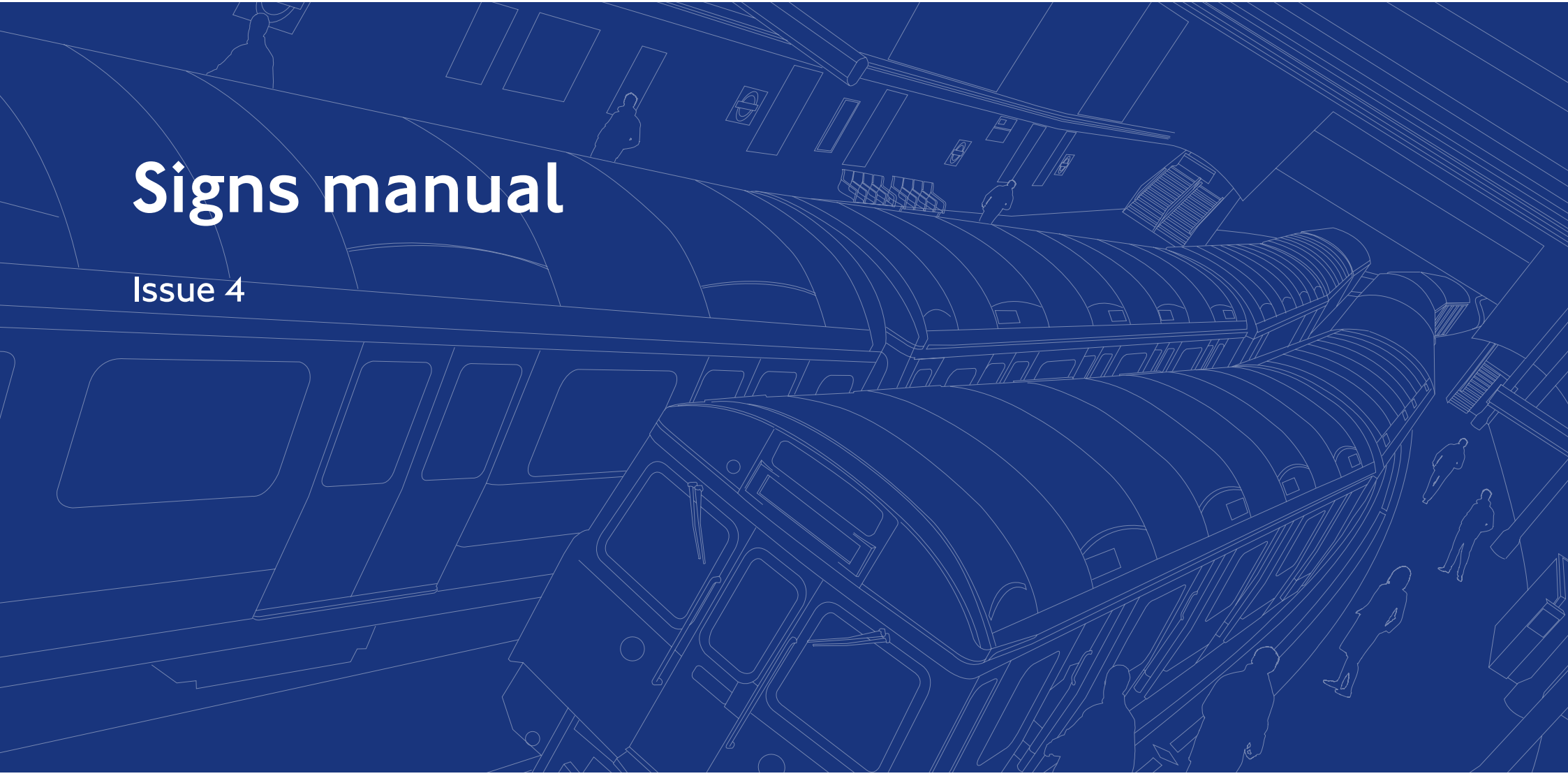
London Underground

Signs manual

Issue 4



MAYOR OF LONDON

Transport for London

Contents

Overview

Basic elements

The customer journey

Specific elements

Index

Throughout the London Underground system, we have a proven, highly successful sign system which clearly identifies us and guides our customers safely and efficiently. Good signing is vital for London Underground to project a consistent, modern and professional corporate image, and is essential to the smooth running of stations.

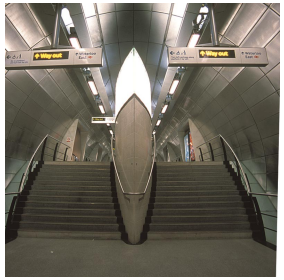
The detailed information in this manual represents the culmination of thorough research, design and development. By careful and consistent application of the standards documented, we will further enhance the image of the Underground.

Stations on the Underground system are diverse in layout and architecture, and as such, this manual cannot contain signing solutions for every station. It will, however, establish the set principles to enable effective and consistent solutions to be applied across the network.

London Underground overview

Good signing assists our customers in negotiating the Underground system and minimises the need to consult station staff. This is the ideal for maximising operational efficiency, for creating the best impression and for gaining customer satisfaction.

The journey from station entrance to the platform, from train to train, or to the station exit is often extremely complicated. In the enclosed, confined and busy environment of the Underground, lack of clear directions can cause considerable anxiety. The principle aim in signing must always be to meet the information needs of the customer.



London Underground overview

The design, layout and content of each and every sign is a considered asset to enable London Underground to project an image of efficiency, consistency and modernity. Compromising the design or production quality would weaken the effectiveness of our signing and our corporate image.

To support our world famous identity, we need to make sure that we install signage which conforms to this Standard, and to ensure that any necessary modification is properly controlled.

1.0 Basic elements

1.1	Roundel
1.1.1	Background areas
1.1.2	Roundel silhouette
1.1.3	Background colours
1.2	Colour
1.3	Lettering
1.3.1	Standard sizes and colours
1.3.2	Viewing distance chart
1.3.3	Line spacing
1.4	Fitting messages onto panels
1.5	Arrows and their direction
1.5.1	Arrows
1.5.2	Placement of arrows
1.6	Symbols and pictograms
1.7	Way out
1.8	Restricted sign layouts
1.9	Signing for mobility-impaired customers
1.10	Headroom restrictions
1.11	Switchable signs
1.12	Panel sizes
1.13	Combining signs and minimum height
1.14	Combining signs and layout details

The basic elements of the London Underground sign system – the roundel, the house and line colours and the New Johnston typeface – are also the building blocks of the corporate identity.

The value of the roundel itself can hardly be over-estimated. It is one of the world's best-known symbols and carries a tremendous weight of goodwill. In order to preserve its value, the rules in this section for its reproduction and application must be strictly adhered to.

Colours are similarly important. Approved NCS colour references should always be used when specifying house and line colours, see section 1.2. Colour samples are provided in the separate 'London Underground colour standards for identity and information' booklet.

The Johnston typeface is representative of the Underground's 'tone of voice'. Its friendly yet authoritative appearance has been a familiar and reassuring sight for decades.

1.1 Roundel

Basic form

This is the basic form of the Underground roundel. The proportions, colours and the exact letter-form, size and spacing of the lettering in the bar are unalterable.

In Underground applications, the roundel always appears with the word ‘Underground’ in the bar, except on platform roundels which display the individual station name. Standards on the exact form of platform roundels are given in section 5.0.

Reproduction

Reproduction of the roundel should be made using Underground-approved roundel artwork only.
No attempt should be made to typeset the word ‘Underground’ or render it by any other means.

1.1.1 Background areas

The immediate area around the roundel, as indicated by the dotted line on the illustration to the right, must be kept free of any other elements of any kind – for example lettering, posters, architectural features, decorative devices and so on.

1.1.2 Roundel silhouette

For station and platform identifiers, the silhouette roundel is an alternative to the square panel version. The choice of which roundel to use will depend on the architecture and location characteristics.

The panel roundel will give greater contrast when viewed with other street or retail signing. The silhouette version is the preferred option for architecturally-sensitive locations.

When a structural frame is used, this should be in proportion to the sign size and be centred on the symbol perimeter line.

1.1.3 Background colours

Ideally, the roundel should be placed on a white square background (1) In practice, this will not always be possible, eg when incorporating the roundel within wall cladding, so it is permitted to place the roundel on a neutral-coloured background whose tonal value is not darker than the 30% black tint shown on this page.

Darker backgrounds (2) detract from the impact of the roundel, as do coloured backgrounds (3) Under no circumstances should it be placed directly onto such backgrounds. When using a silhouette roundel it is not permissible for the counters (4) to vary from the background colours.

(1)

10% 20% 30%

Approved backgrounds

(2) (3) (4)

40% 50% 60%

Incorrect backgrounds

1.2 Colour

Line colours provide a direct visual to the customer's initial point of reference – the Tube Map – as well as to other diagrams and service information. They also help non-English speakers find their way around the system.

As well as the use of Underground blue and red as primary corporate colours on specific elements such as the roundel, entrance fascia and directional sign lettering, Underground 'line' colours are expressed as a strip above line directional signs, and on the platform frieze.

Specific colours also have additional uses for safety signs and notices.

1.2 Colour

The house colours of the Underground are red and blue, but there are other colours, particularly line colours, which contribute to the identity.

The matrix on the following page details the various applications of all the colours currently being used on the Underground, showing where common uses exist.

It should be noted that quality control is vital to ensure accurate colour matching, and that checks must be carried out during manufacture and on delivery of signs. Colour samples and references can be found in the separate 'London Underground colour standards for identity and information' booklet. A4-size NCS colour swatches can be purchased from:

Edgebrite Limited
60b High Street
Bridgnorth
Shropshire WV16 4DX

Telephone 01746 767500

or

Langford & Hill
38-40 Warwick Street
London W1R 6LS

Telephone 020 7437 9945

The colours for use on DTLR signs, ISO/BSI standard signs etc, should follow the standards established by those organisations.

Future developments in the Underground rail network may necessitate the adoption of additional colours, which will be incorporated into this manual as appropriate.

1.2 LUL colours

	Piccadilly line Underground dark blue NCS S 3560-R80B	Central line Underground red NCS S 1085-Y80R	Victoria line Underground light blue NCS S 2060-B	District line Underground green NCS S 2565-G	Circle line Underground yellow NCS S 0580-Y10R	Metropolitan line Underground magenta NCS S 4050-R30B	Bakerloo line Underground brown NCS S 4050-Y50R	East London line Underground orange NCS S 0585-Y30R	Hammersmith & City line Underground pink NCS S 0550-R10B	Northern line Underground black NCS S 9000-N	Jubilee line Underground light grey NCS S 4005-R80B	Waterloo & City line Underground turquoise NCS S 1040-B80G	Sign frames Underground dark grey NCS S 7010-R90B	Underground white NCS S 0500-N	Underground safety blue NCS S 3065-R90B	Underground safety red NCS S 1085-Y90R
House colour																
Line colour strip	●	●	●	●	●	●	●	●	●	●	●					
Roundel	●	●												●		
Fascia background	●															
Directional signs lettering	●															
Way out					●											
Supplementary signs	●	●		●	●					●				●	●	●
Emergency signs				●												
National Rail denotation													●			
National Rail interchange		●														
Docklands interchange													●			
3mm dividing line											●					
Sign case and supports													●			
Non-communicative sign parts													●			

1.2 TfL mode colours

	NCS S 3560-R80B	NCS S 1085-Y80R	NCS S 2050-B50G	NCS S 0580-G30Y	NCS S 2060-R70B	NCS S 1070-Y20R	NCS S 4010-G30Y	NCS S 2060-B
London Underground	●	●						
London Buses		●						
Docklands Light Rail			●					
London Trams				●				
Public Carriage Office					●			
Victoria Coach Station						●		
Street Management							●	
London River Services								●

1.3 Lettering

New Johnston

All lettering within the sign system is carried out using New Johnston Medium, a modern adaptation of the historic Johnston typeface, devised in 1906 by Edward Johnston for London Transport's exclusive use. New Johnston is a legible typeface with a large 'x' height and being heavier in weight, is easily read on signs.

Lettering is in upper and lower case, with an initial capital letter at the start of sign messages and for proper names, except for station names on roundels, fascias and friezes which are upper-case letters only. For further guidance on these aspects, see sections 2.0 and 5.0.

The second alphabet shown is for illuminated use only. The lettering will appear yellow out of black in the case of 'Way out' and reversed out of a background colour in the case of switchable signs, as described in the relevant sections.

For sign use, specific rules of letter and word spacing have been developed to maximise legibility. Contractors are not permitted to digitise these typefaces or vary the letter spacing in any way.

New Johnston Medium

New Johnston Medium illuminated use only

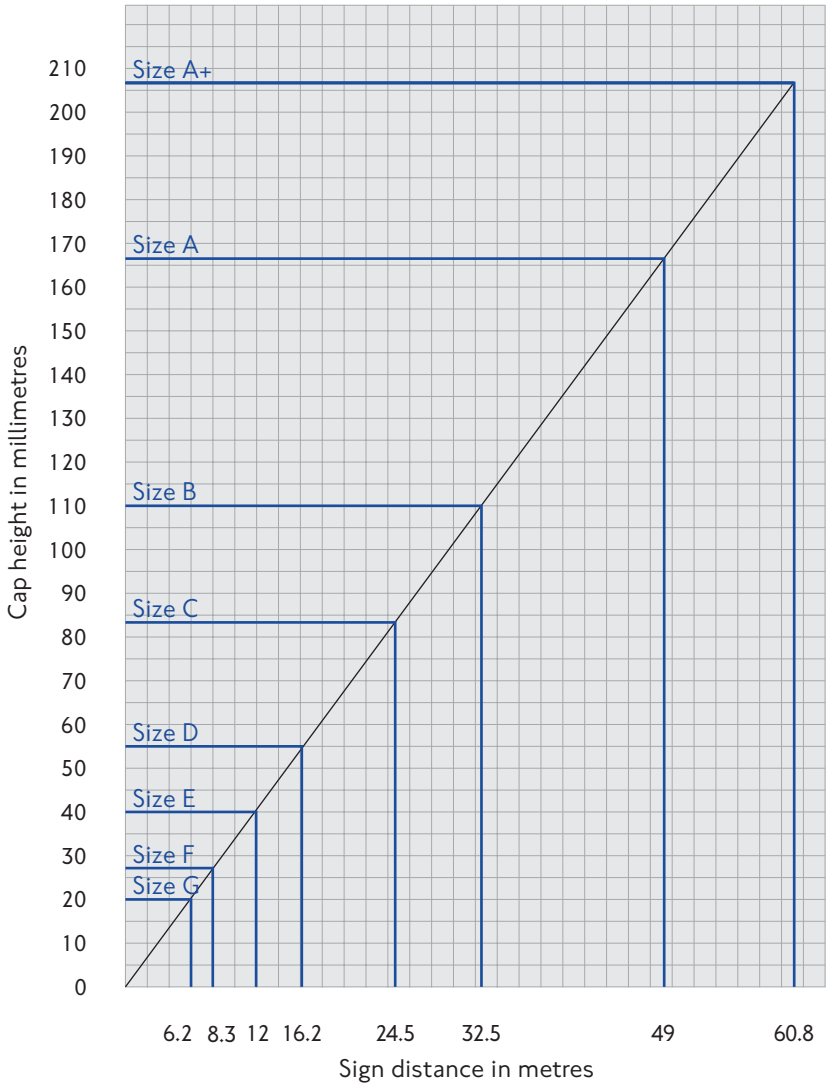
1.3.1 Standard sizes and colours

The lettering used throughout the directional system is New Johnston Medium in upper and lower-case letters. For directional sign use, the lettering is available in eight standard sizes, shown on the next page. No other sizes may be used on directional signing. On directional signs, lettering is always in Underground dark blue on Underground white panels, with the exception of 'Way out' signs, which display Underground yellow lettering on an Underground black patch. For colour specifications see section 1.2. For details of 'Way out' signs, see section 1.7.

1.3.2 Viewing distance chart

This chart shows the distance at which certain sizes of lettering can be read by a person with average eyesight. The data obtained should be used to determine the minimum letter size for any sign.

Other considerations, such as architectural features or visual continuity, may influence the final choice of letter size, but the optimum size will be used wherever possible.



Type sizes	Cap height	x height	Margins
Size A+	206	150	450
Size A	166	120	300
Size B	110	80	200
Size C	83	60	150
Size D	55	40	100
Size E	41	30	75
Size F	28	20	50
Size G	21	15	38

1.3.3 Line spacing

Line spacing is based on the height of the lower-case letter ‘x’. One ‘x’ is the standard minimum between two lines of information. When information in more than one size of lettering is used, the larger ‘x’ height should be used to separate the two lines of differing size.

1.3.3 Line spacing

Correct line spacing is achieved by using the 'x' height of the lower-case letter as the normal minimum space between two lines of type of equal size 1

When using information in more than one size of lettering, the larger 'x' height is used to separate the larger size from the smaller size 2 3 4 and 5

When the message reverts to one type size only, its 'x' value should be used between those consecutive lines of type as the normal maximum standard.

x = x height of largest letter size

x = x height of secondary letter size

x = x height of smallest letter size

1

2

3

4

5

1.4 Fitting messages onto panels

Signs with line colour strip

On signs indicating a direction to a line, a strip of the line colour should always be included above the line message. This is a fixed depth of 50mm and runs the length of the sign panel.

x = x height of largest letter size

All measurements are in millimetres

1.4 Fitting messages onto panels

Signs with line colour strip

When two lines run together, for example District and Circle lines, the 50mm colour strip is divided in half along its length, giving a 25mm strip of each colour. In exceptional cases, for example when using the smaller type sizes F and G, the colour strip may be reduced by half.

The space from the bottom of the colour strip to the baseline of the first line of type is 2x. The value 'x' is always equal to the 'x' height of the letter size being used for the first line of the message, even though it may be followed by a second line of a larger type size.

x = x height of largest letter size

x = x height of smallest letter size

All measurements are in millimetres

1.4 Fitting messages onto panels

Signs without line colour strip

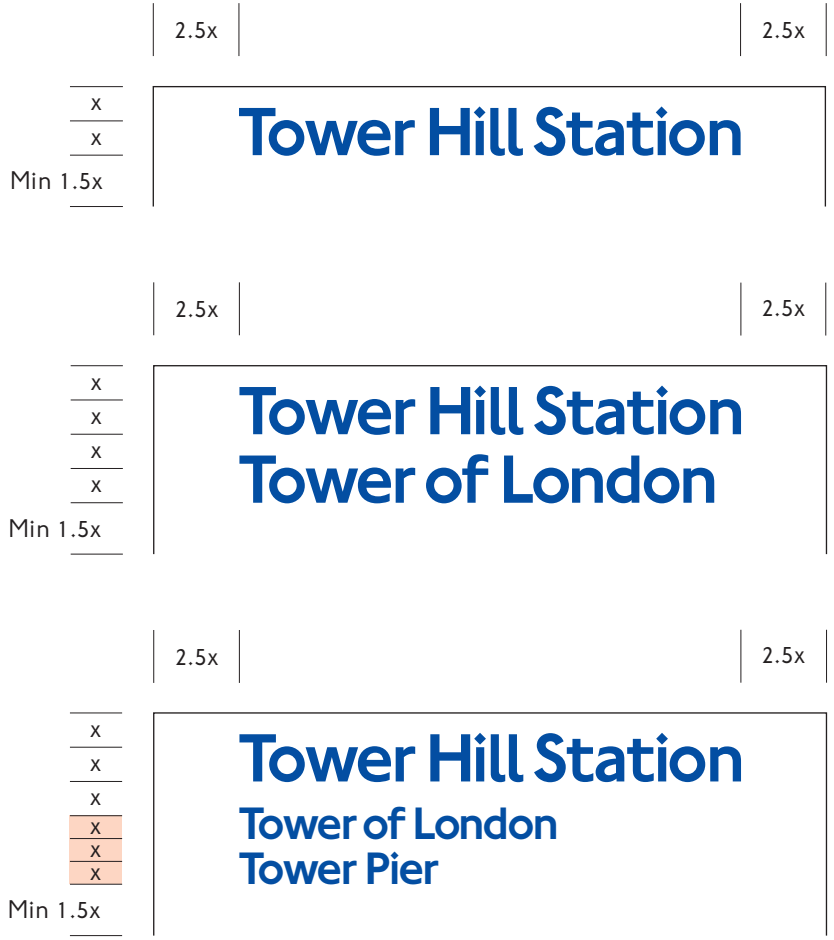
The space from the top edge of the panel to the baseline of the first line of type is 2x. The value 'x' is always equal to the 'x' height of the letter size being used for the first line of the message, even though it may be followed by a second line of a larger type size.

Margins

Margin rules apply to all sign types and panel sizes. All directional messages are ranged left or right, according to the direction indicated by the arrow, see section 1.5. The margin distance is equal to 2.5x of the largest letter size used, unless ranged with other information, for example 'Way out' patches, see section 1.7.

A minimum margin of 2.5x must also be provided at the end of the message.

A minimum distance of 1.5x must be left at the base of a sign panel. The 'x' value is always equal to the 'x' height of the largest letter size being used. The depth of the panel must be rounded off to the nearest 50mm increment.



x = x height of largest letter size

x = x height of smallest letter size

All measurements are in millimetres

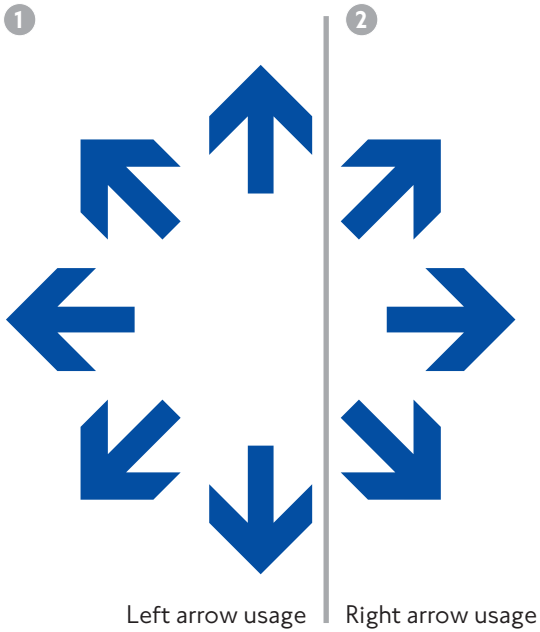
1.5 Arrows and their direction

Arrows indicating direction to the left, straight ahead or down should be placed on the left-hand side of the first line of the message 1 Arrows indicating direction to the right should be placed at the right- hand side of the first line of the message 2

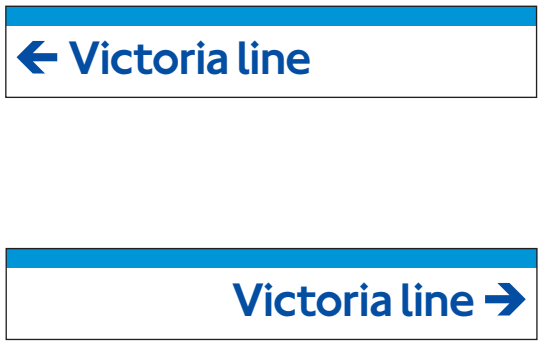
Sign messages should be ranged left or right according to the direction indicated by the arrow 3

Where a sign carries several messages of equal emphasis and the direction indicated is the same, only the arrow of the first message need be used.

Where one sign message is subsidiary to another and is in a smaller size of lettering, an arrow should be included only with the main message.



3



1.5.1 Arrows

Arrows

Arrows are centred both on the cap height and within the 2.5x margin area.

c = Cap height of largest letter size

All measurements are in millimetres

1.5.2 Placement of arrows

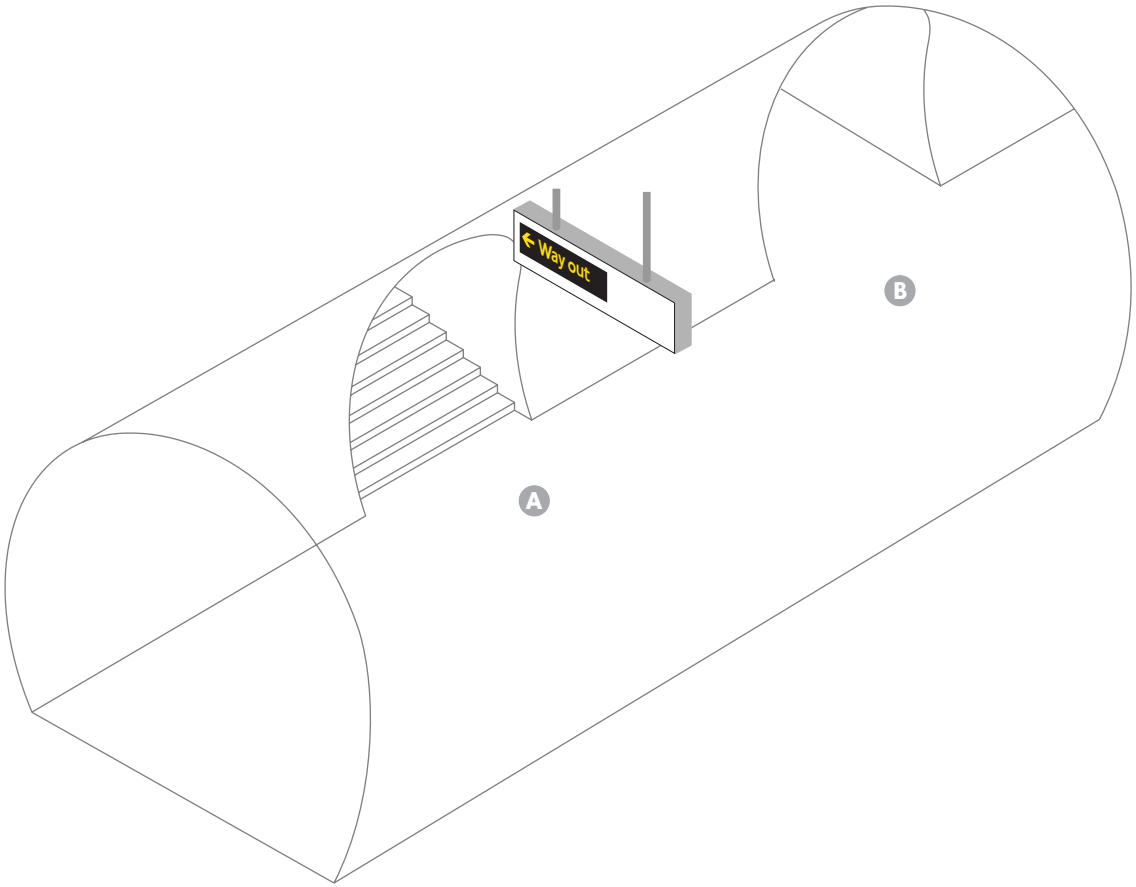
Placement of arrows

When positioning arrows of a 45-degree indication, great care must be taken in their use, as they have no inherent exactness and therefore are open to misinterpretation.

The diagram to the right shows a situation where an arrow indicating up and left, because of a change in floor level at exit A may well be misunderstood to mean half left or towards the left to exit B

The most accurate arrow to use in this situation would be the left direction, see below. This would eliminate uncertainty of direction and ensure a consistent customer flow.

When choosing and positioning directional signs, it is vital that the sign planner understands and is aware of the possible confusion caused when more than one choice of path is available. The point to remember is that the correct path must be chosen, and it may be necessary to disregard any change in floor level.



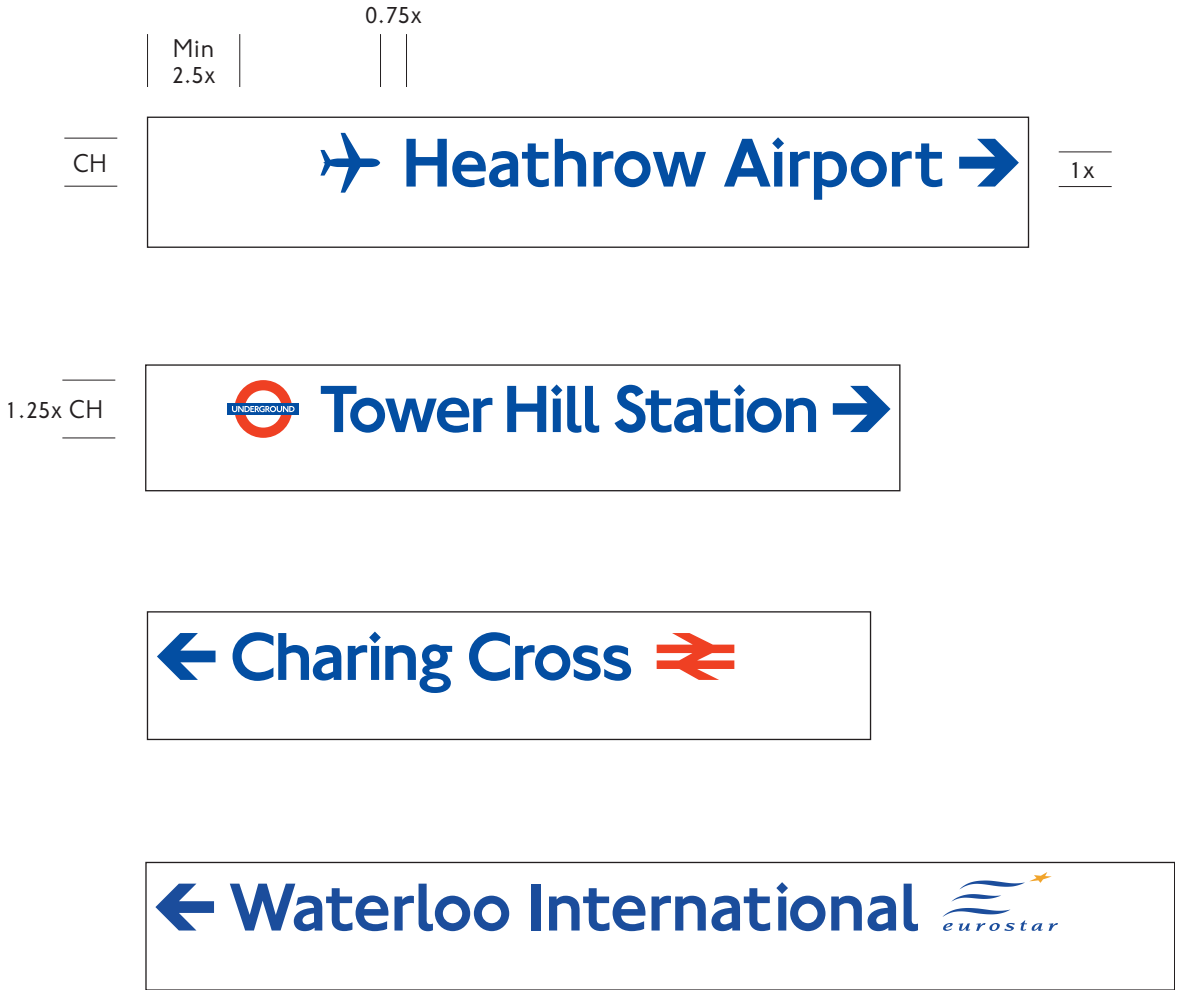
Correct usage

Incorrect usage

1.6 Symbols and pictograms

Position of symbols within layouts

Where symbols or pictograms are to be incorporated in directional signs, they must appear at the opposite end to the arrow. A space of 0.75 times the 'x' height is inserted between symbol and text. The height of the symbol should be 1.25 times the cap height, and centred on the cap height. Pictograms must not be longer than 2.5 times the x height, and the height will reduce proportionally.



CH = Cap height

1.6 Symbols and pictograms

As directional signs within the Underground environment primarily direct to lines and platforms using names and colour, symbols and pictograms do form a primary part of directional signing. There are certain key messages, however, which must always be accompanied by a pictogram or symbol. At international interchanges, such as Heathrow, pictograms may also be used to assist non-English-speaking customers.

We must not confuse the role of pictograms and network symbols with that of safety symbols, which are covered on the Safety signs section of this document (section 9.0).

These are defined as follows:

Safety symbols

1 Safety symbols are used as the primary signing element to communicate safety messages, as required by European legislation. Symbol colour, background colour, and background shape are all used to communicate the safety message.

Network symbols

2 Network symbols are used to identify primary transport networks, such as National Rail or London Buses. These should always be displayed in the designated colour of the network, alongside the network name in standard dark blue LUL type. Symbols for individual operating companies, eg Silverlink, must not be used on directional signing.

Pictograms

3 The function of pictograms on the Underground is to clarify sign messages for non-English-speaking customers, and to represent symbolically facilities, such as toilets. Only approved LUL pictograms may be used, and these are always displayed in Underground dark blue, with the exception of the 'Information' symbol, which appears in grey. The range of approved LUL signing pictograms is detailed on the next page.

1

2

3

2 of 3

1.6 Symbols and pictograms

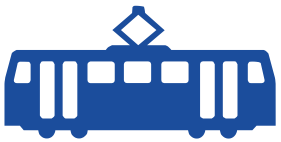
Rivercraft

Taxi

Airport

Buses (left)

Buses (right)


Trams

Cycles

Parking

Symbols to be transposed to suit directions

Men

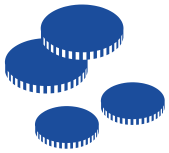
Women

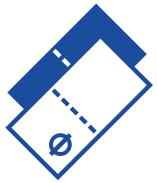
Disabled

Baby changing

Pushchair

Queue


Change


Tickets (roundel optional)

Luggage

Information

Telephones

CCTV

1.7 Way out

The ‘Way out’ indication differs from the rest of the directional signs, in that the lettering is yellow out of a black patch of fixed proportions. For colour specification see section 1.2.

The reasons for this difference are recognition and visibility, and the fact that most ‘Way out’ signs must be illuminated for statutory safety reasons. The use of the ‘patch’ introduces consistency in the presentation of illuminated and non-illuminated ‘Way out’ indication.

Internal illumination also means that ‘Way out’ signs can be arranged for switchable operation. For further details of switchable signs, see section 1.11.

The ‘Way out’ patch can be incorporated into any sign, provided the dimensional restrictions described on this page are adhered to.

‘Way out’ patch sizes

B	240 x 980
C	180 x 735
D	120 x 490
E	90 x 368
F	60 x 246
G	45 x 185

Note: Two arrows should not be displayed on a sign unless switchable

x = x height of largest letter size

x = x height of smallest letter size

All measurements are in millimetres

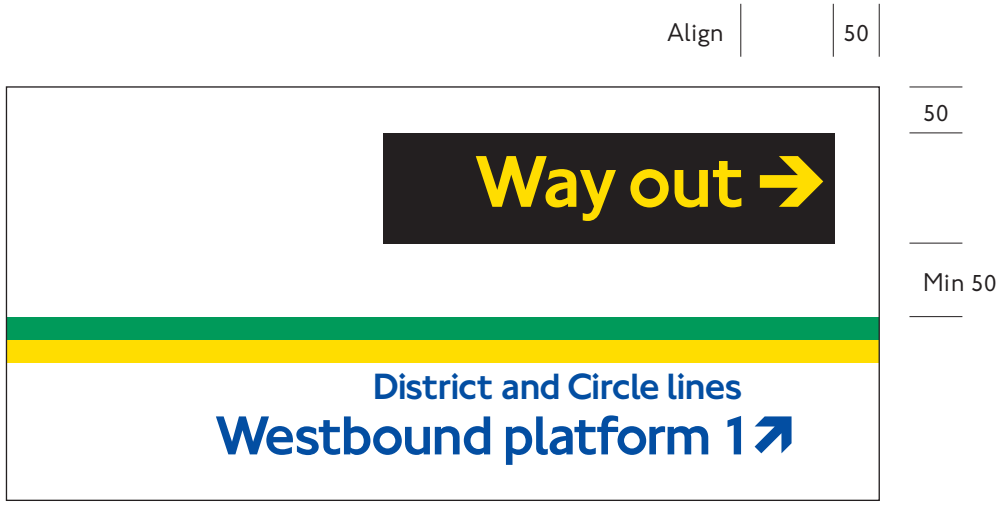
1 of 2

1.7 Way out

Top and side margins on the ranging edge of the 'Way out' patch are of a fixed 50mm dimension. All other margins should be a minimum of 50mm.

Other 'Way out' information, for example, street names and National Rail interchanges, may be combined on the same sign with a 'Way out' patch, as shown on this page. Other information is normally aligned with the baseline of 'Way out'. When the information is used at a small size, or there are multiple lines, the top of the capital may be aligned with the top of the 'Way out' patch as shown.

Examples of signs incorporating a 'Way out' patch are shown with more detailed layout information in section 1.14 and in section 6.0.



Align type baselines

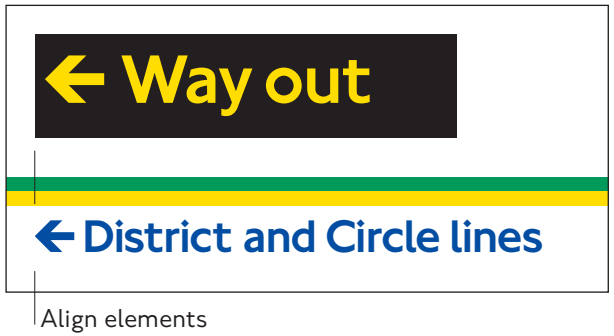
Align cap height with top of patch

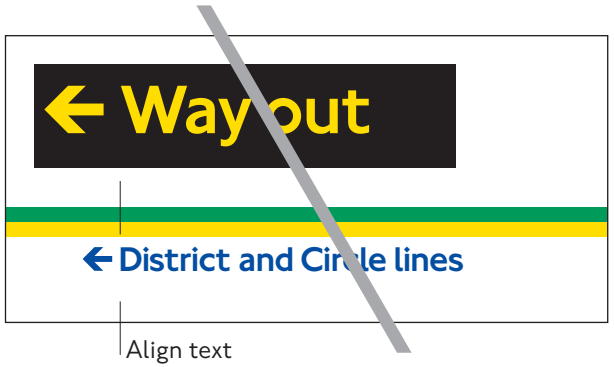
x = x height of smallest letter size

1.8 Restricted sign layouts

Signing width restrictions

Where sign widths are restricted to a degree where text heights suffer due to alignment rules, margins should be varied to allow legible type sizes as shown.



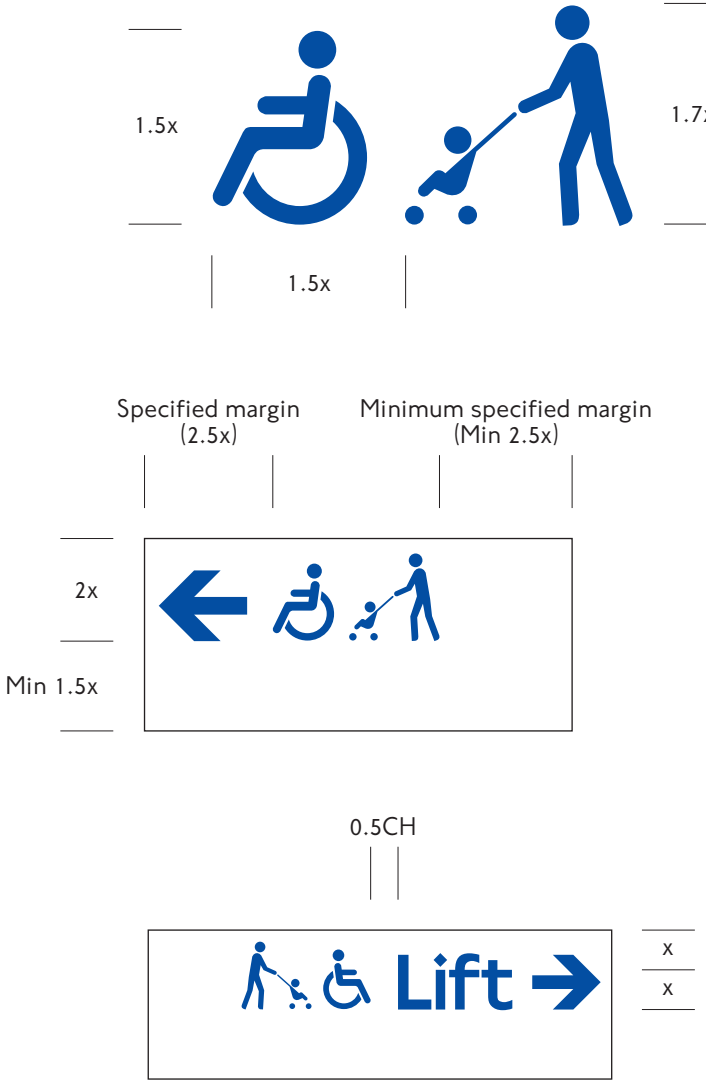


1.9 Signing for mobility-impaired customers

Signing for people with impaired mobility should be used to mark alternative routes within Underground stations for wheelchair users, and customers with pushchairs or wheeled luggage. The signs should be used only at the point where the alternative route deviates from the usual route.

Additional signs should be used to guide mobility-impaired customers to the specific facilities along the alternative route. Signing for mobility-impaired customers uses wheelchair and pushchair pictograms. These are always used together, as shown. The pictograms are Underground dark blue on an Underground white background. The viewing distance chart in section 6.6 should be used in conjunction with the table provided on this page when deciding the appropriate pictogram size.

The wheelchair and pushchair pictograms may be combined with directional arrows as shown. They may also be combined with descriptive messages, for example 'Lift' or 'Ramp', within the immediate vicinity of alternative facilities in order to aid recognition. When combined with directional arrows, the pictograms should be adjusted to reflect the direction indicated.



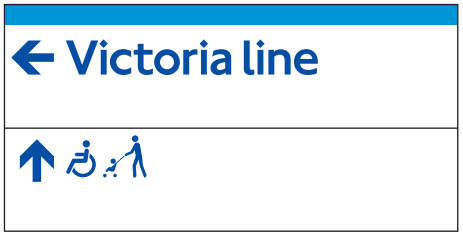
1 of 2

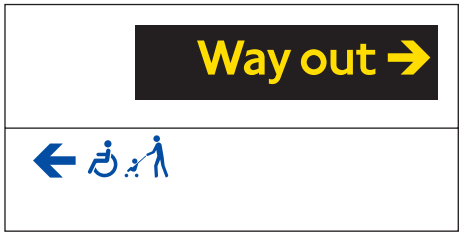
1.9 Signing for mobility-impaired customers

Signs for people with impaired mobility may be combined with other directional signs and 'Way out' signs, at the point where the alternative customer route deviates from the usual route. An exception is, for example, when two 'Way outs' are indicated and only one is suitable for mobility-impaired customers. In such a case, sign panels carrying the pictograms and a directional arrow should be used before the deviation point.

Where stations have several lifts, they should be letter coded as detailed in section 10.18.

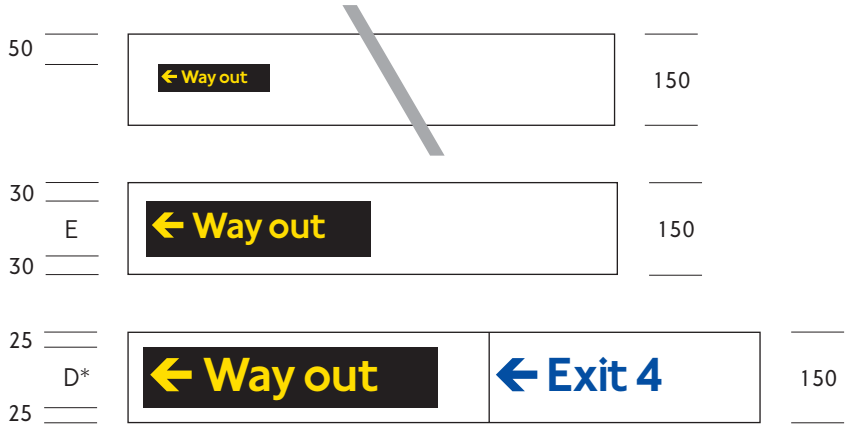
			Wheelchair pictogram	Pushchair pictogram	
Type sizes	CH	x	(1.5x)	(1.7x)	Margins
A+	206	150	225	255	450
A	166	120	180	204	300
B	110	80	120	136	200
C	83	60	90	102	150
D	55	40	60	68	100
E	41	30	45	51	75
F	28	20	30	34	50
G	21	15	23	26	38





1.10 Headroom restrictions

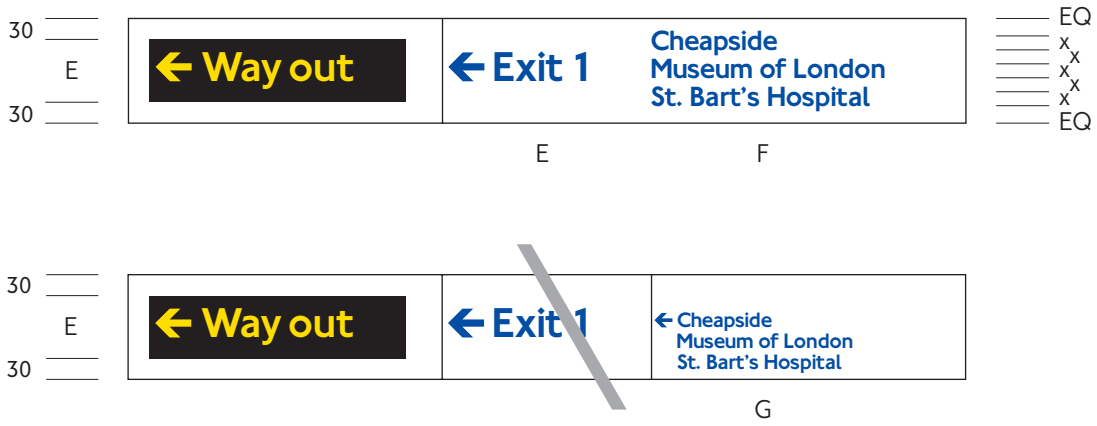
Where subways have extremely restricted headroom, a minimum illuminated sign depth of 150mm may be used. Using the 50mm margin would result in an unacceptably small 'Way out' patch (size G). The margins must therefore be reduced to allow for E or D size 'Way out' patches – D being used where longer viewing distances are involved.



* With upper margin reduced by 7mm and lower margin by 13mm

1.10 Headroom restrictions

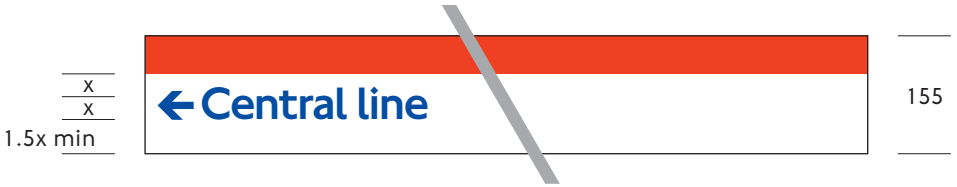
Where associated information aligned to exit number text would result in illegible text size, text should be increased and vertically centred within normal margin restrictions.



1.10 Headroom restrictions

Lower margins

Where restricted headroom unduly affects text sizes and operational legibility, lower margins may be adjusted as shown, using standard type sizes where possible.

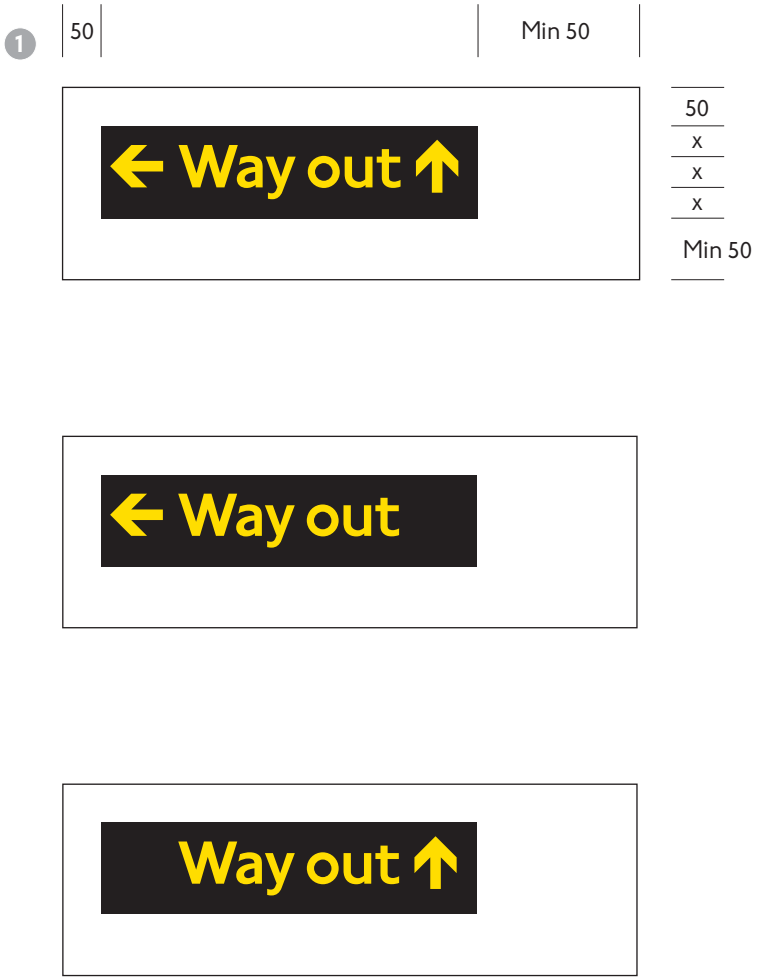


1.11 Switchable signs

As a result of particular operational requirements, it is sometimes necessary to change the paths that customers take for interchange between other services or 'Way out'. To do this, a style of switchable sign has been developed to be compatible with all other directional signs.

Switchable 'Way out' and interchange information

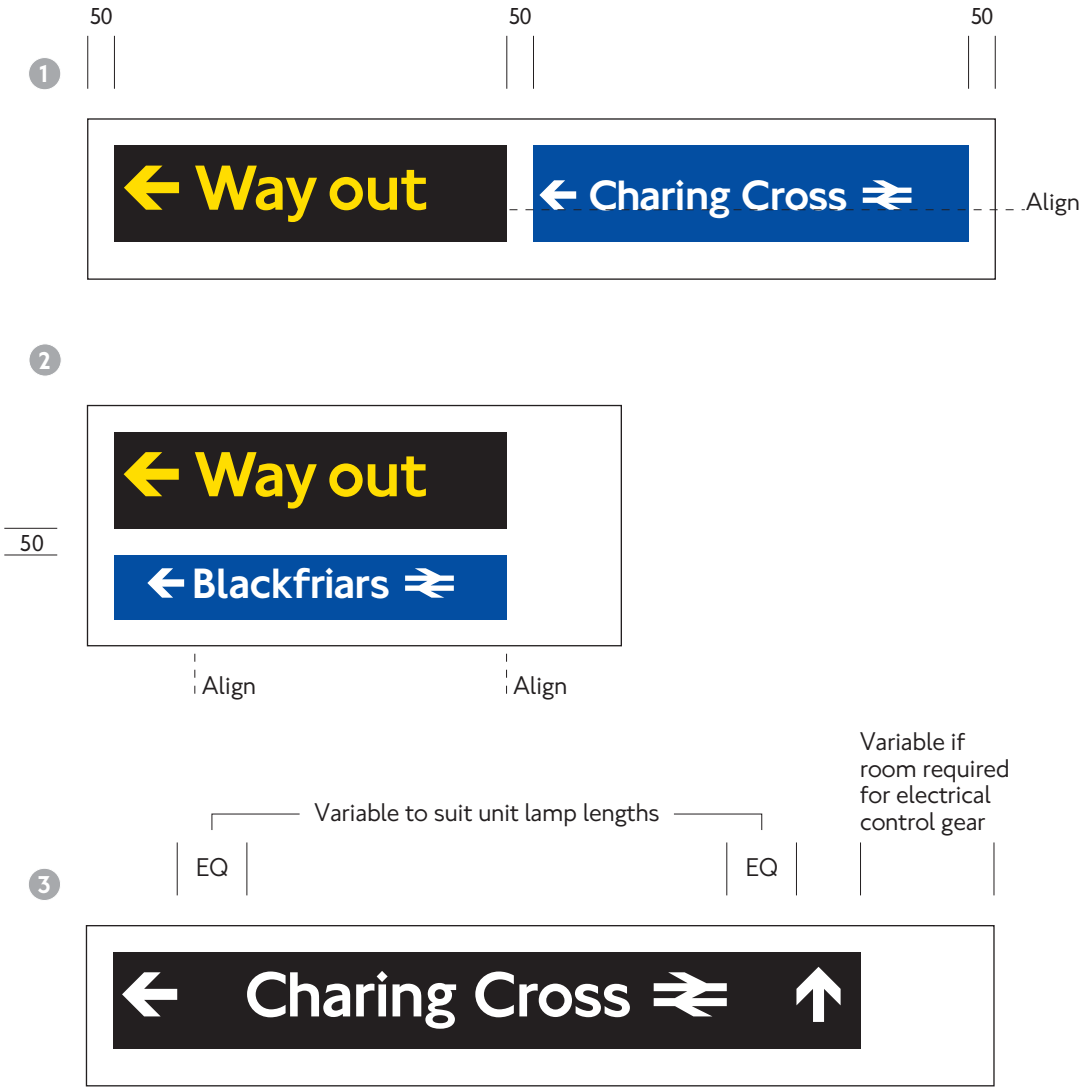
The 'Way out' patch has been designed in set proportions to carry an arrow either side of the message, allowing for the direction of 'Way out' to be switched 1



1.11 Switchable signs

Where additional interchange or other information is switchable, this should be displayed as illuminated white text on a dark blue illuminated patch. The text must be obscured when the sign is unlit. Layout of text and arrows within the patch follow exactly the same principles for directional signs, and should be aligned to any associated 'Way out' text to side or above as shown 1 2 The length of the sign may vary from the set modular sizes to allow for electrical control gear.

Where a panel requires switchable arrows, the switchable panel background should revert to black, to avoid any partitions being visible on partial illumination 3 4 As the unswitched text part of the directional message will require separate illumination, the arrow to text spacing may be varied within reason to suit standard lamp lengths.



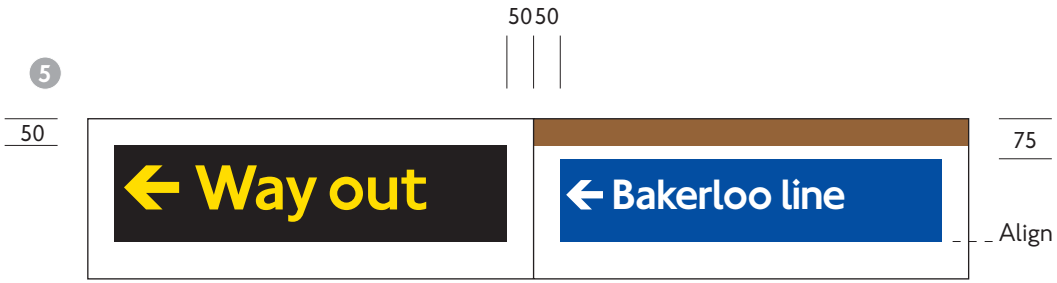
1.11 Switchable signs

Switchable line information signs follow the same layout principles as already described, the only difference being a 75mm top margin to accommodate a 50mm colour strip at the top of the sign 5 6

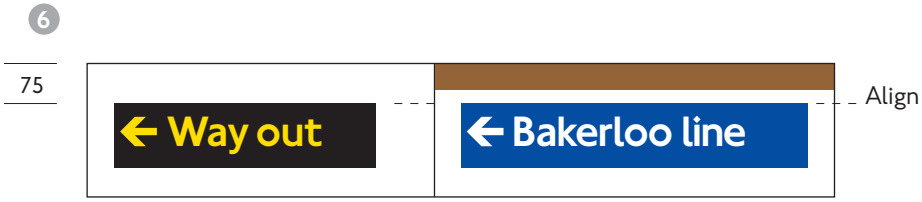
Where switchable 'Way out' and directional panels are positioned side by side, the margin rules should be adjusted to allow visual alignment of elements as shown in the diagrams.

4

5



6



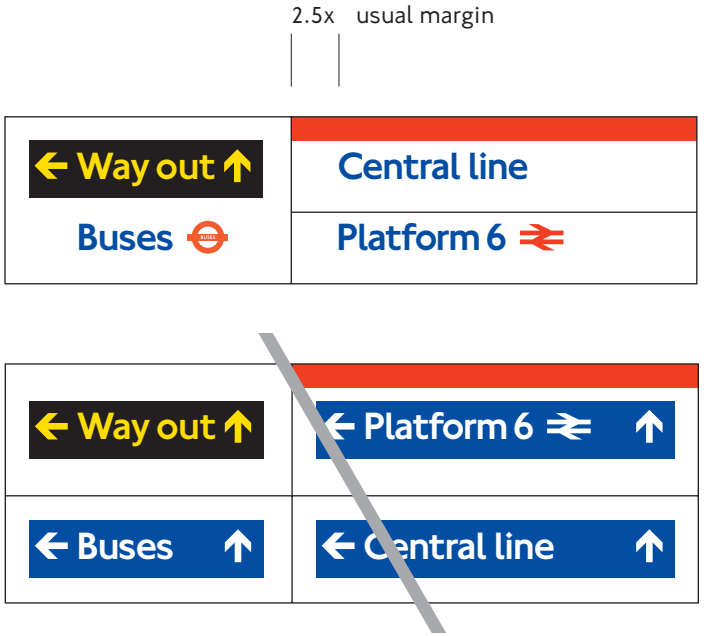
1.11 Switchable signs

Simultaneously switched directions

Where switchable signs direct to several locations, which require simultaneous switching to control customer flows, the use of several large glass patches should be avoided.

If a switchable 'Way out' is present, all other switchable arrows may be omitted, so all directions will appear linked to the single switchable arrow. No other conflicting arrows may be present on the sign.

1 Arrows switch between down and right.



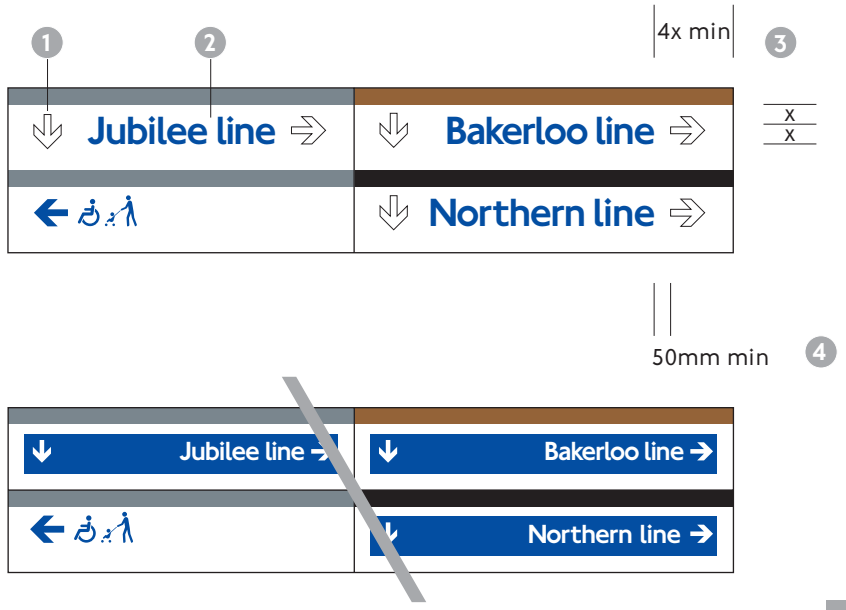
1.11 Switchable signs

Independently switched directions

Where switchable signs direct to several locations, which require independent switching to control customer flows, the use of several large glass patches must be avoided.

Inlaid white acrylic arrows should be used in flanged aluminium panels, to allow the switchable sign to have a similar layout to unswitched equivalent.

1. Inlaid white (028) acrylic arrow
2. Screened aluminium face
3. 4x minimum to allow space for mini lamp units behind
4. 50mm minimum to ensure correct level contrast between lit and unlit areas

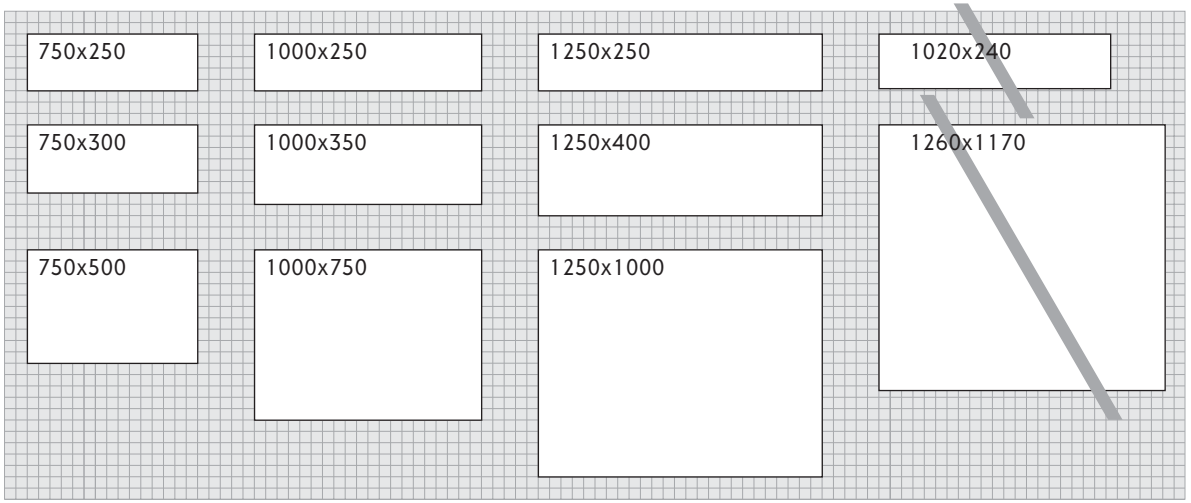


1.12 Panel sizes

The panels of the directional sign system are based on a 50 x 50mm grid. The choice of panel size depends on:

- Lettering size for optimum legibility, see section 1.3.2
- Length of message or messages to be contained
- Architectural considerations, for example space available, surface decoration and so on
- Juxtaposition with other signs, see section 1.14.

Some scaled-down examples of panel sizes are shown on this page superimposed over the grid. Panel sizes which do not conform to the 50 x 50mm grid may be used only in exceptional circumstances, for example when incorporated into an architectural feature or printed onto wall-cladding panels.



All measurements are in millimetres Scale 1:20

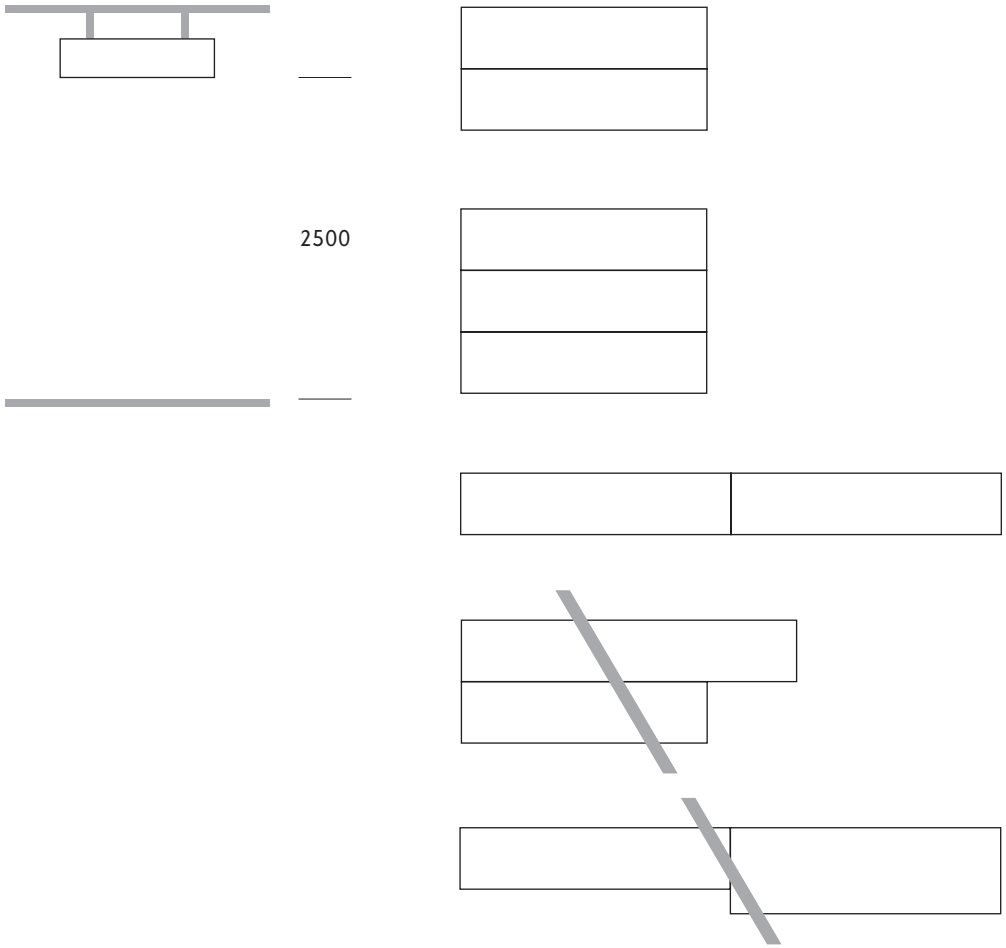
1.13 Combining signs and minimum height

Sign panels should preferably be manufactured in one piece. However, it will sometimes be necessary to combine separate signs, either because the overall size is too large for manufacturing processes, or because additions are made later.

In these cases, panels must be of matching dimensions, either in width or depth.

The minimum height for the lower edge of a ceiling fixed or hanging directional sign panel above floor level is 2.5m. Those concerned with establishing final ceiling heights should take this into account at the design stage.

Where it is unavoidable that the level of signing will fall below 2.5m, formal dispensation must be sought.



1.14 Combining signs and layout details

The following pages show examples of typical sign layouts, where directions are combined in different ways, and the general alignment principles which should be adopted to ensure layouts appear visually balanced and are easy to read.

Generally, when combining sign messages, the panels should be horizontally combined to minimise the depth of the sign. This will aid sightlines and allow larger type sizes within a constrained headroom area 1

When signs are fitted to narrow walls or columns, the layout should be combined vertically 2

1

2

1.14 Combining signs and layout details

Where panels containing text are combined with 'Way out' panels, the baselines of the first line of text should be aligned 4 and 3

Where the alignment of baselines will result in an unbalanced, bottom-heavy layout, the top of the directional text may be aligned with the top of the 'Way out' patch 5

3

4

5

1.14 Combining signs and layout details

Examples 6 and 7 show two different layouts which may be adopted to convey the same information, depending on site constraints. Where height may be a problem, the horizontal version will be more suitable. Where the sign may be partially obstructed by columns or vertical elements, the narrower format may be more suitable. Generally the horizontal version is preferred.

Where exit and directional information share the same direction, the information should be ordered so that the illuminated 'exit' panel is at the leading end of the sign 8

6

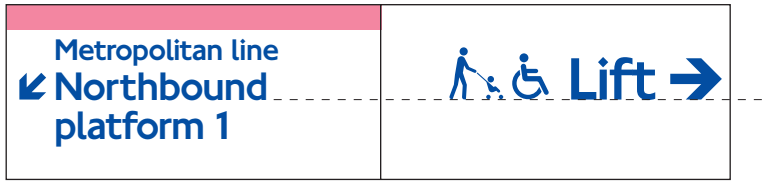
7

8

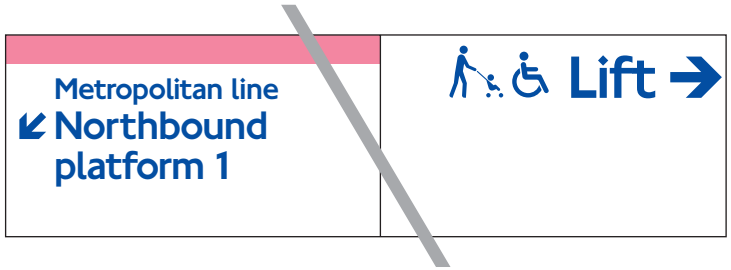
1.14 Combining signs and layout details

Where one sign panel containing several lines of text is horizontally combined with a sign of a single text line, the primary text line baselines should be aligned, in this case the lines containing the arrows 9 and 10

9



10



1.14 Combining signs and layout details

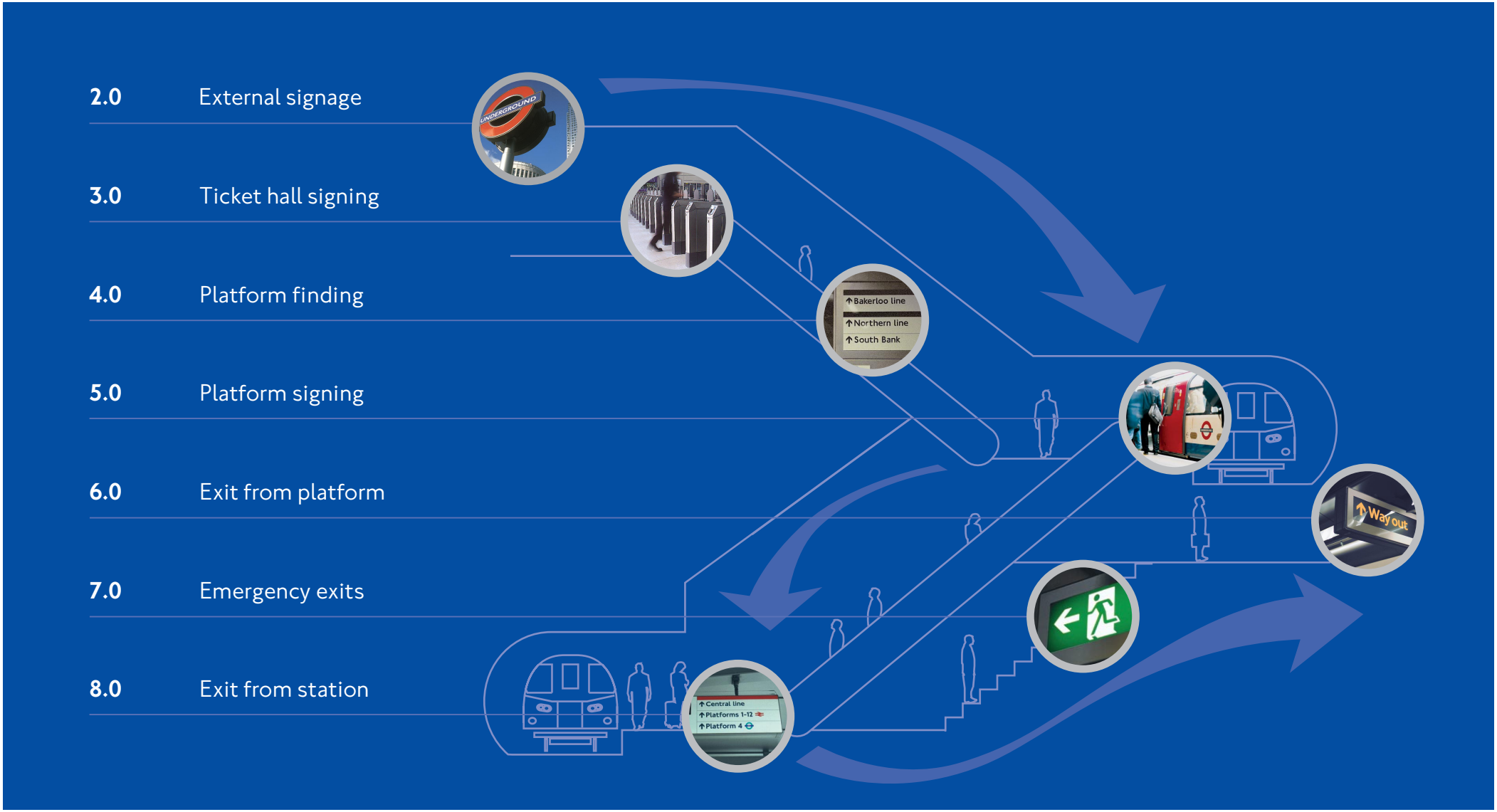
Where a series of signs appear along a platform or passageway, with different levels and quantities of information, we should strive to maintain a consistent format, adjusting the order of information to suit, providing the clarity of the sign message is not compromised. In examples 11 and 12 the layout of the Underground line elements has been adjusted to group logically by direction, the Northern and Victoria line in the bottom example being clearly separate from the other elements.

It should be noted in sign example 11 that the fire equipment point is on the platform immediately below the sign.

11

12

The customer journey



The customer journey

Our customers perceive the Underground as a difficult and stressful environment. Without correct signing and information, the possibility of making a wrong decision about line, direction or interchange is increased and stress levels will rise accordingly. This section of the manual covers the requirements of specific station areas as a trail of information, from entering a station through to exiting at the end destination.

For clarity, only the primary direction signing required for customers to pass through the system is described in this section. Other, more specific areas, such as evacuation and safety signing, which are relevant to all areas of the station, are covered in section 9.0.

2.0 External signage

2.1	Examples
2.2	Elements
2.3	Panel version principles
2.4	Pole-mounted silhouette version
2.5	Wall-mounted silhouette version
2.6	Fascia principles
2.6.1	Lettering sizes
2.6.2	Position of lettering
2.7	Positioning of signs
2.8	Shared facilities
2.9	Heritage stations

There are two versions of the roundel which may be used, the panel and the silhouette. The choice of roundel will depend on the architecture and location characteristics. Some existing silhouette roundels may also be restored if they are of heritage interest, or considered to be intrinsic to the building.

The panel roundel will give greater contrast when viewed with other street or retail signing. The silhouette version is the preferred option for architecturally-sensitive locations. At interchange stations where the entrance serves more than one transport network, an interchange totem sign should be adopted, see section 2.8.

2.1 Examples

The examples shown here and on the following page indicate the application of the basic elements at a variety of stations.

External signs are those which identify Underground stations. For two main reasons, these signs function in difficult circumstances.

Firstly, they are often in very competitive, busy environments where other signs and visual clutter are a severe disturbance to instant recognition.

Secondly, the architecture of stations varies so widely, that it is not possible to give hard and fast rules which will apply to all installations.

2.1 Examples

More than the other categories of signs, external signs affect, and are affected by, the architecture on or by which they are placed. The need for impact and recognition must always be balanced with the need for conservation and appropriateness.

2.2 Elements

The main elements of the external signs are the roundel and the fascia. Generally, the roundel provides identification of a station and its entrance. The fascia acts as a secondary identification element and gives the name of the station. A roundel must always be present at station entrances, but there will be cases where it is not possible to include a fascia.

There are two versions of the roundel which may be used, the panel and the silhouette. The choice of roundel will depend on the architecture and location characteristics. Some existing silhouette roundels may also be restored if they are of heritage interest, or considered to be intrinsic to the building.

The panel roundel will give greater contrast when viewed in conjunction with other street or retail signing. The silhouette version is the preferred option for architecturally-sensitive locations. At interchange stations where the entrance serves more than one transport network, an interchange totem sign should be adopted, see section 2.8.

1

2

3

2.3 Panel version principles

The background panel proportions are exactly as laid down in section 1.2.2 and confirmed on the diagram on the right.

Two standard sizes should be used: 1m² and 1.5m². If any other size is required, the exact proportions of roundel to panel must be adhered to.

The standard forms of the roundel sign are a single-sided panel and a double-sided panel.

Wall-mounted

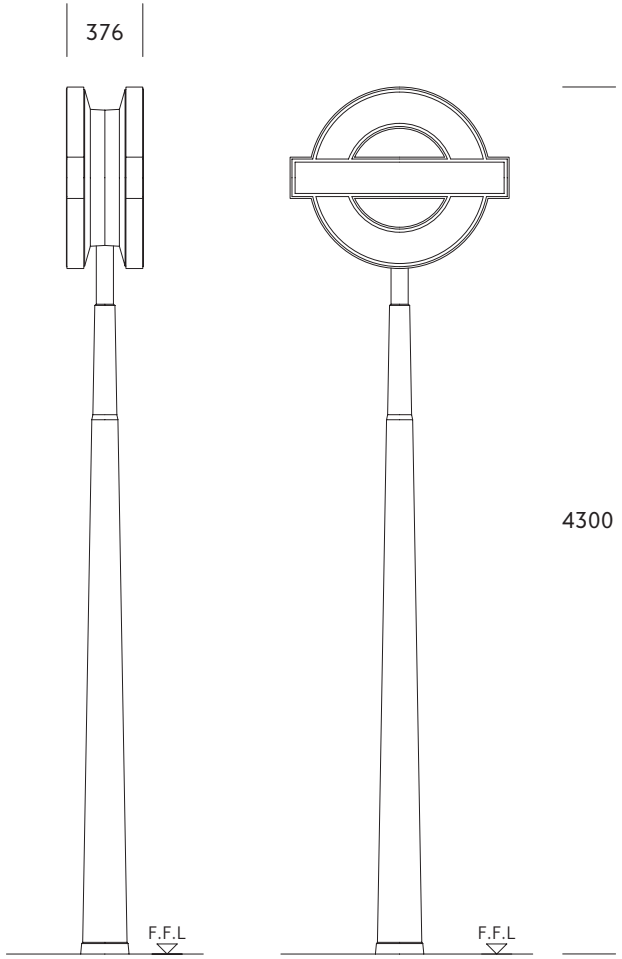
Pole-mounted

Hanging

Projecting

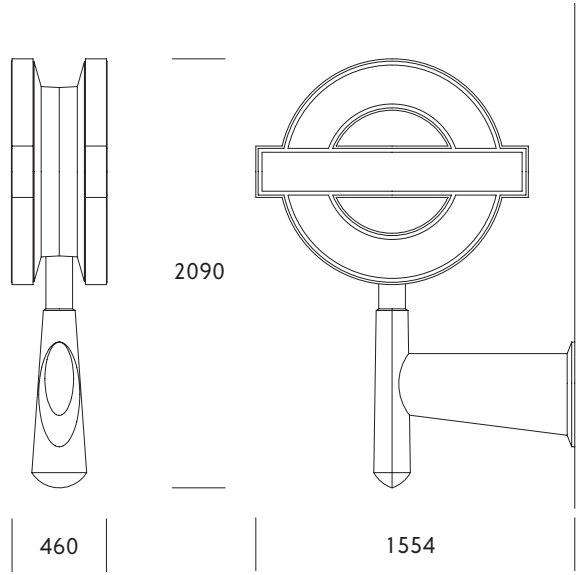
2.4 Pole-mounted silhouette version

Designed specifically for architecturally-sensitive locations, the pole-mounted version of the roundel clearly communicates the location of entrances, while being remote from the building structure. This design has been approved by English Heritage for use in sensitive areas, and has a tapered cast elliptical pole, with spun-aluminium symbol. Care must be taken when positioning the roundel to ensure maximum visibility, without creating an obstruction to pedestrians.



2.5 Wall-mounted silhouette version

Designed specifically for architecturally-sensitive locations, the wall-mounted (also known as cantilevered) version of the roundel has been designed to be in keeping with both modern buildings and listed stations, and has been endorsed by English Heritage for use in sensitive areas. When positioning the roundel on buildings, care must be taken to ensure that the sign can be viewed at a distance, and the sign mounting arm may be varied in length to allow visibility where recessed.



2.6 Fascia principles

Most stations are equipped with a fascia or fascias. Often, a fascia is part of a canopy structure which has a distinctive style of its own.

These standards are therefore concerned only with the colour of the fascia panels and the lettering.

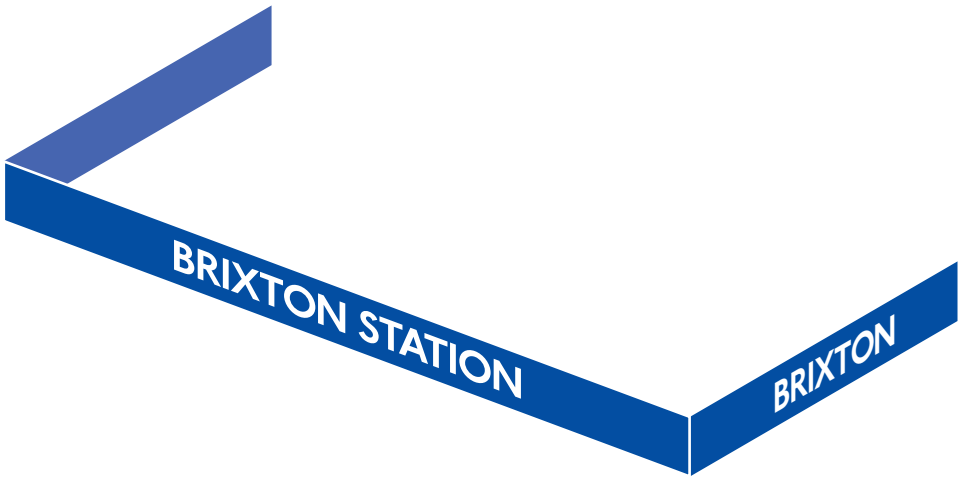
The background colour is Underground dark blue with Underground white lettering. For colour specification see section 1.2. The station name appears in capital letters.

1. Generally only the station name appears on fascias and is suffixed by the word ‘STATION’
2. Underground stations whose entrances are within National Rail stations should have the word ‘UNDERGROUND’ included — for example ‘VICTORIA UNDERGROUND STATION’. Where space is limited in such situations, it may be permissible simply to use ‘UNDERGROUND’
3. The side panels of canopies are plain blue. Where the front of the canopy cannot be seen from the pavement, for example, the station name may appear on the side panels.

1

2

3



2.6.1 Lettering sizes

Size of lettering on the fascia is dependent on the available depth and length. The correct proportions are shown opposite. These should apply whatever the depth of the fascia. These proportions do not include the depth of any sign framing.

The only exception is if the station name will not fit into the available length. In such cases, the word 'STATION' may be omitted and, if the space is still not sufficient, the size of lettering may be reduced.

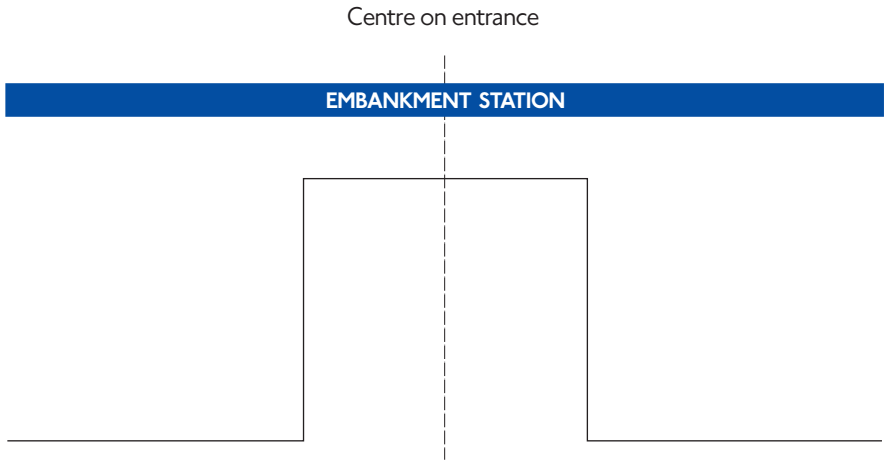
Line names are generally not included, except where there are separate stations with the same name, for example at Hammersmith and Edgware Road, and where an entrance is dedicated to one line at a station which serves two or more lines. The line name should be in upper and lower case lettering as shown on pages 4.1 and 4.1.1.

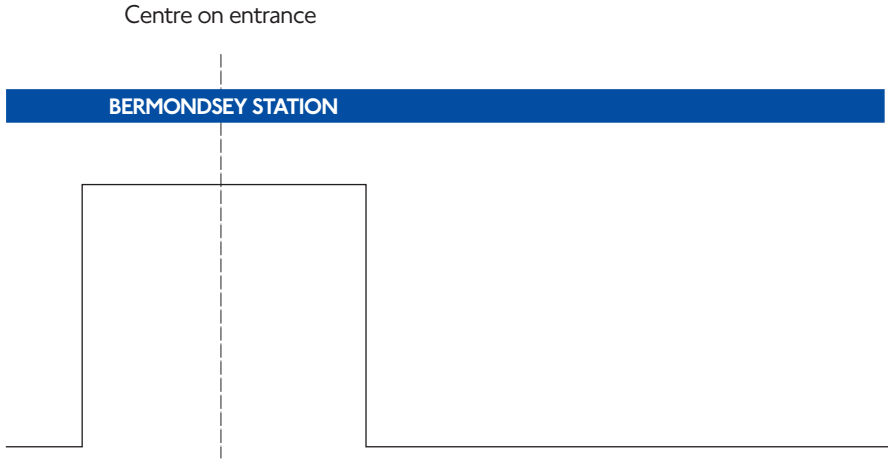
Where necessary the station name may be shown in two lines, but this must always be centred in capitals.

2.6.2 Position of lettering

In the absence of any other indications, the lettering should be positioned in the centre of the fascia.

However, where appropriate, the position of the lettering can help to indicate the station entrance, especially when this is not immediately obvious. This possibility is illustrated on this page.





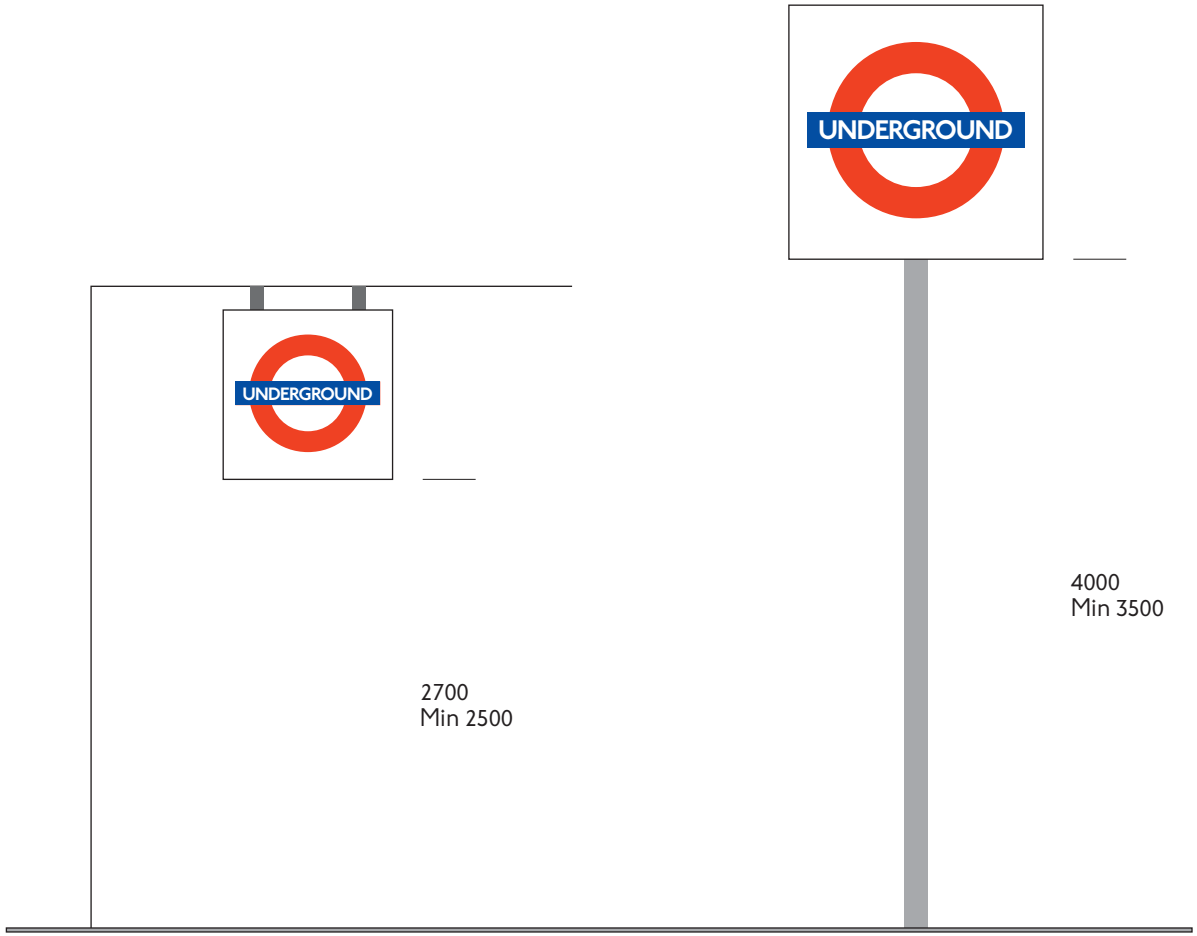
2.7 Positioning of signs

Although it may not always be possible to position signs ideally, due to architectural or other considerations, certain parameters should be followed as closely as possible.

These diagrams indicate optimum and minimum clearances from pavement level.

However, each location will have to be considered individually on its own merits.

While these diagrams show the panel version of the roundel, the same principles should be adopted for the silhouette versions.



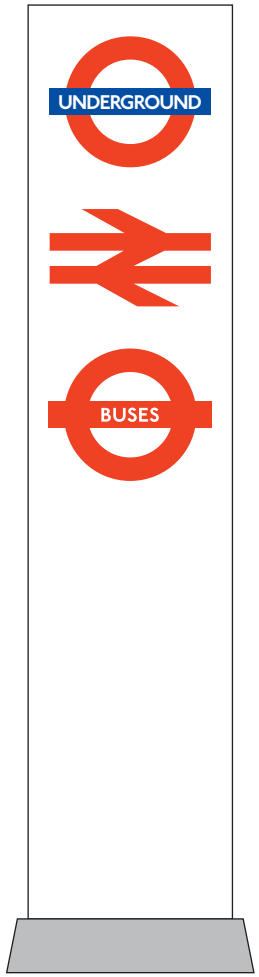
2.8 Shared facilities

At interchange stations where the entrance serves more than one transport network, an interchange totem sign should be adopted. The purpose of the totem is to clearly and consistently identify the modes available around a particular site. At station entrances only the core network identities are to be displayed, eg National Rail symbol may be used but Train Operating Company logos are not permitted. For further details on the use of combined network signs at interchange stations, refer to the TfL 'Multi-Modal Interchange Signs Standards'.

There are two principal versions of the interchange totem, a base-mounted version which can accommodate all network symbols required, and a wall-mounted version which may be used for two network symbols. Both share a curved profile in white aluminium, with inset curved illuminated acrylic symbols.

Totems should be positioned in particular locations to ensure that from all approaches to the site, the modes of transport available at or around the site, are easily recognisable from a distance.

All transport services will be identified on a totem, so long as they meet the criteria deemed necessary for inclusion as an interchange.



1 of 2

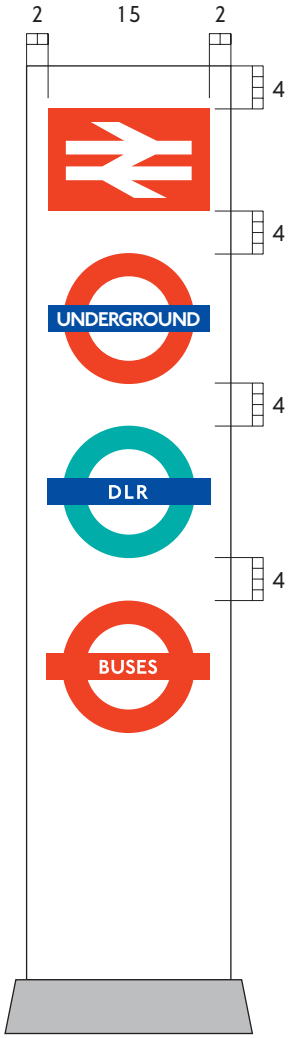
2.8 Shared facilities

Using fixed proportions

The visual identities of the core networks are displayed together on identification signs at interchanges. Each one must be clearly visible, but also balanced fairly, so that one identification sign does not overwhelm the others.

To achieve this balance, the network logos are displayed together in fixed proportions.

The logos' proportions are based on a square grid composed of 15 units in each direction.



Order of display

Once the logos have been sized, they should be positioned together vertically or horizontally. The first logo to be displayed is determined by the ownership of the interchange.

At interchanges based on railway stations, this often means that either the National Rail logo or the London Underground logo will come first, followed by the other logos in order of customer usage.

Using station names

Station names should be displayed on all totems. The only exception is where a totem is situated close to a fascia displaying a clearly visible station name.

2.9 Heritage stations

London Underground is proud of its design heritage, and a conscious effort has been made to conserve and restore the best of the old to sit alongside the new.

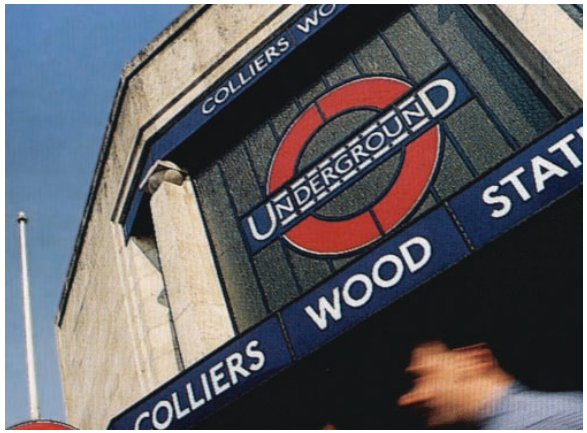
External signs are of particular importance, as these often reflect the period when a station was built, and are characteristic details which give interest and local colour to the capital. Many of our stations are listed buildings, so we have a statutory obligation to maintain or restore the entrance signing in keeping with the building. Where heritage considerations arise when resigning a station, each case needs individual consideration. The general principles, and specific examples, are detailed in the 'London Underground Heritage Signing Standard'.

The examples on this page show the original Colliers Wood station in 1926 1 just before restoration 2 and the restored station in 1996 3

1

2

3



3.0 Ticket hall signing

3.1 Entering a ticket hall
3.2 Ticket machines
3.3 Ticket window signs
3.4 Information posters unit
3.5 Dedicated gateline
3.6 Ticket gate penalty warning signs
3.7 Gateline signing
3.8 Lift signing

On entering a station, customers need a range of pre-travel information, logically laid out and accessible. A Tube Map must be clearly visible, showing the network of lines and interchanges, to enable the customer to establish or confirm their route. For details of the information poster requirements at stations, refer to section 8.1.1.

Real-time information has been identified as particularly important in developing the customer's confidence in the service we offer. By alerting them to disruptions at the earliest opportunity, we enable them to make timely alternative arrangements. Information units should be clearly visible on entry to the ticket hall, and must be positioned so as not to obscure primary directional signing. For details of these indicators, refer to the LUL customer service delivery standards.

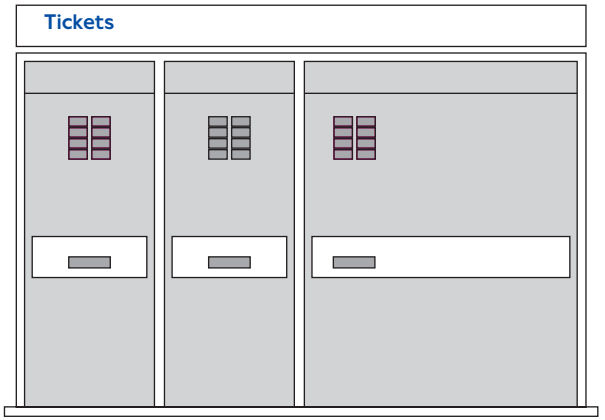
3.1 Entering a ticket hall

Before the customer has purchased a ticket, there should be clear confirmation of the Underground lines served by the station. This will normally take the form of ceiling-mounted signing facing the customer on entry to the ticket hall. For clarity, platform numbers and directions should not be displayed at this point.

Where ticket-buying facilities are not facing the customer on entry, overhead signing should also incorporate directions to the ticket office and machines. When establishing the positions of such signs, the use of the reverse face must be considered for display of exit information as detailed in section 8. To maintain clarity, only primary directional signing and real-time information indicators should be ceiling-mounted within ticket halls. No ceiling-mounted commercial signing may be displayed, unless approved by LUL.

3.2 Ticket machines

Over each bank of ticket machines, signing should be fitted, spanning the entire width and containing the word ‘Tickets’ as illustrated. The only other elements which may appear on these signs are the tickets pictogram (refer to section 1.6), or directions to additional ticket/change-giving facilities.

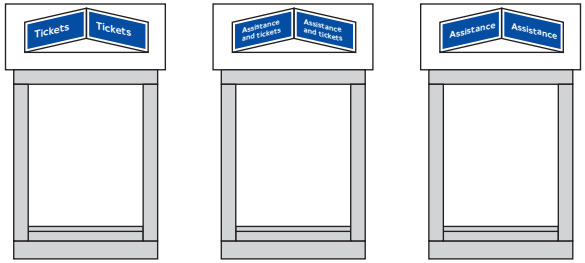


3.3 Ticket window signs

Ticket window signs are mounted above the window as an illuminated, triangular, projecting sign. Where appropriate, this may be integrated into the architectural treatment of the window area. Three typical window messages are illustrated opposite. These signs must be switchable (obscure when unlit) to make it clear which window positions are open.

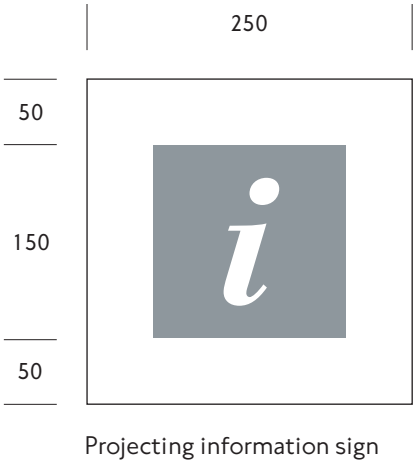
On some recent stations, following the Jubilee line extension design, the ticket window text has been incorporated into the glass wall panels over the windows, which are then illuminated from the reverse.

All vinyl labels associated with ticket-buying conditions and instructions (see photograph) are covered in the 'LUL Station Presentations Handbook', together with ordering details.

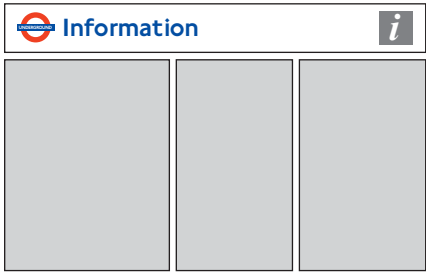


3.4 Information posters unit

Where possible, information poster units such as the Tube Map, timetables etc should be grouped together. This should be headed up by a panel spanning the entire extent of the frames, and bear the word ‘Information’, together with the standard information pictogram. Where poster frames are fitted in such a way that customers generally approach from the side, a projecting information flag sign should be used, fitted centrally above poster frames.



Projecting information sign



3.5 Dedicated gateline

Where access to lines is split within the unpaid side of the ticket hall, ie where access to lines is via dedicated gatelines, line diagram signs must be fitted to enable customers to confirm their target destination before passing through the gatelines.

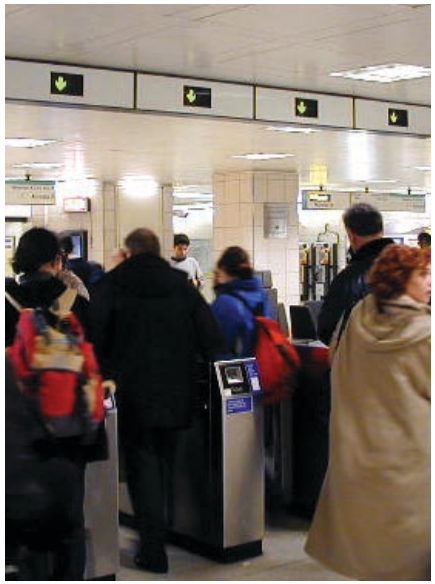
3.6 Ticket gate penalty warning signs

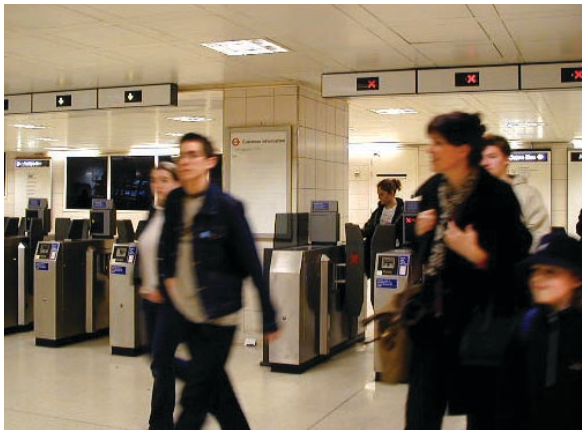
Where ticket gates are fitted, 'penalty fares' signing is incorporated within the gate structure as shown in the photographs. Such signing and ordering details are covered in the 'LUL Stations Presentation Handbook', which also covers associated labels for manual gates. No additional penalty fares signing is permitted.

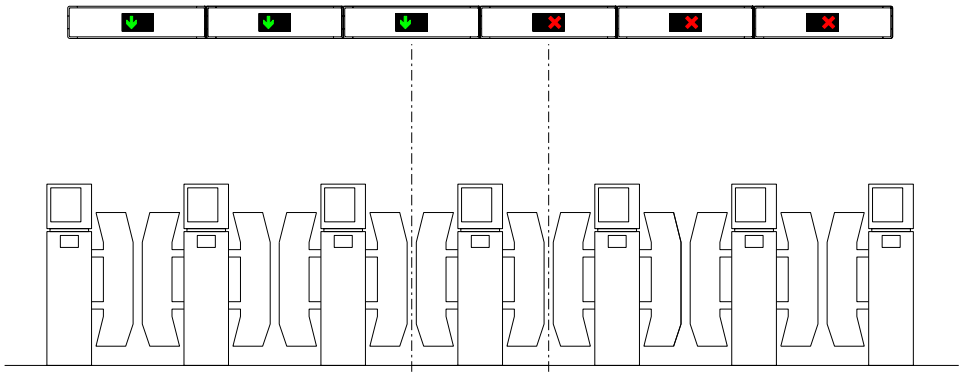
Where gates do not exist, standard penalty fares signs (A) should be ceiling-mounted over the gateline, conveying the same information as shown. These signs may be combined with line direction information if required.

3.7 Gateline signing

For long gatelines in busy stations, a switchable illuminated overhead gantry may be fitted, to amplify the gate conditions from a distance using the same arrow/cross symbols. These should be electronically controlled from the gates and must switch in conjunction with the gates. They must also fail safe in the event of the gate release plunger being operated, displaying arrows over the exit paths from all gates.







3.8 Lift signing

Where a station is fully accessible, it is not always obvious that the route through a station may involve several lifts. Customers may assume one lift will go from street to all platform levels, which is unlikely. Unless a lift serves all areas, signing over lifts should include supplementary text showing the areas served generally as shown.

Where there are several lifts within a complex interchange station, the lifts should be letter coded (as shown). As detailed in section 10.18.

For details of lift coding refer to section 10.18

3.8 Lift signing

Line names should be used with line colour bands for clarity. Care must be taken to ensure that on exit from the lift, signing is immediately visible to continue the journey.

4.0 Platform finding

4.1	Ticket hall to platform
4.2	Order of information
4.3	Sign progression
4.4	Line diagrams
4.4.1	Line diagrams – layout details
4.5	Platform bifurcation
4.6	Emphasis of information
4.7	Key destinations
4.8	Platform confirmation
4.8.1	Platform confirmation – numbers
4.9	Special cases
4.10	Train indicators

Having passed through the gateline, the customer will now follow a trail of signs to the correct platform. It is essential that the signing displayed en route is clear and unambiguous, with an emphasis on areas of decision making. If unnecessary information is displayed, signs become more cluttered, harder to read on the move, and cause confusion. Signs should be orientated to face customers' movement wherever possible, and should be of consistent text size and format.

At all changes in direction or decision points, signs should be clear and unobstructed on approach. All escalators require clear signing showing all areas served by the escalator, which should generally be ceiling-mounted centrally over the bank of escalators to allow for reversal. On the reverse of such signs, information should be avoided if possible, to stop customers panicking to read it on a moving escalator, or stopping directly at the bottom, thus causing a safety hazard.

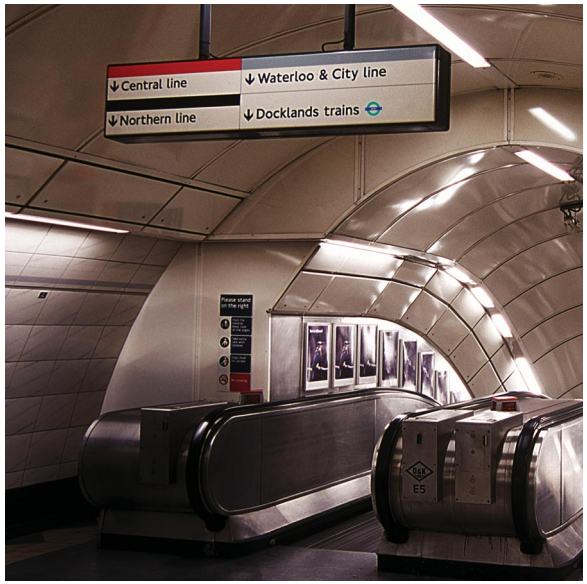
Where there are long subway routes, repeater signs should be used at frequent intervals to reassure customers that they are going in the right direction.

4.1 Ticket hall to platform

For the majority of stations, the order of information on signs will follow consistent, clear principles.

The first signs in the concourse or subways will give directions using just the line names and colour bands, the information being limited to what is needed at that point.

At a decision point between lines, the same line directional signing is used, but supported by line diagrams displaying the stations served (refer to section 4.4). The overhead line signs should be orientated to face customers directly. The line diagrams should be positioned so as to be visible when approaching the decision point, but not cause congestion if customers stop to read them.



4.2 Order of information

When signs direct to lines and platforms, a strict order of information must be followed.

The order is:

- Line
- Direction/platform
- Destinations

The line message is simply ‘Central line’, ‘Victoria line’ and so on. For example, only where ‘District and Circle lines’ share the same platform may the message be combined.

The platform message includes the compass-point description, so ‘Southbound platform 1’ is treated as one message which may, however, be divided into two lines of text.

The destinations message must be only a short list, for example major stations served. A full list of stations served is given only in the form of a line diagram, see section 4.4 and 4.4.1.

Victoria line

Victoria line
Southbound platform 1

Victoria line
Southbound
platform 1

Victoria line
Southbound platform 1

Euston
Oxford Circus
Victoria

4.3 Sign progression

These illustrations show a typical progression of signs from ticket hall to platform.

The sequence starts with a sign which refers only to the line(s), see 1 Platform information is not introduced until a bifurcation point is reached, see figure 2

Reference to destinations may be included by listing the main stations served, see figure 3 or by a line diagram, see figure 4 (next page). The decision on which to employ will primarily be based on customer information requirements, and the available space.

1

2

3

4.3 Sign progression

It should be noted, however, that it takes longer to find a single station name on a line diagram than on an abbreviated list, although it does give greater orientational information.

Lists of main destinations are therefore more suitable for use at busy bifurcation points, where the presence of customers studying line diagrams can cause congestion. Note that these are listed in geographical not alphabetical order.

Further along the sign path, confirmation signs should be used to provide reassurance, see figure 5

Upon arrival at the platform, trackplates may be installed to confirm line, direction and platform information, refer to section 4.8. Where it is not possible to fix a trackside line diagram, platform confirmation should be given on a sign suspended at right angles to the track, see figure 6

4

5

6

4.4 Line diagrams

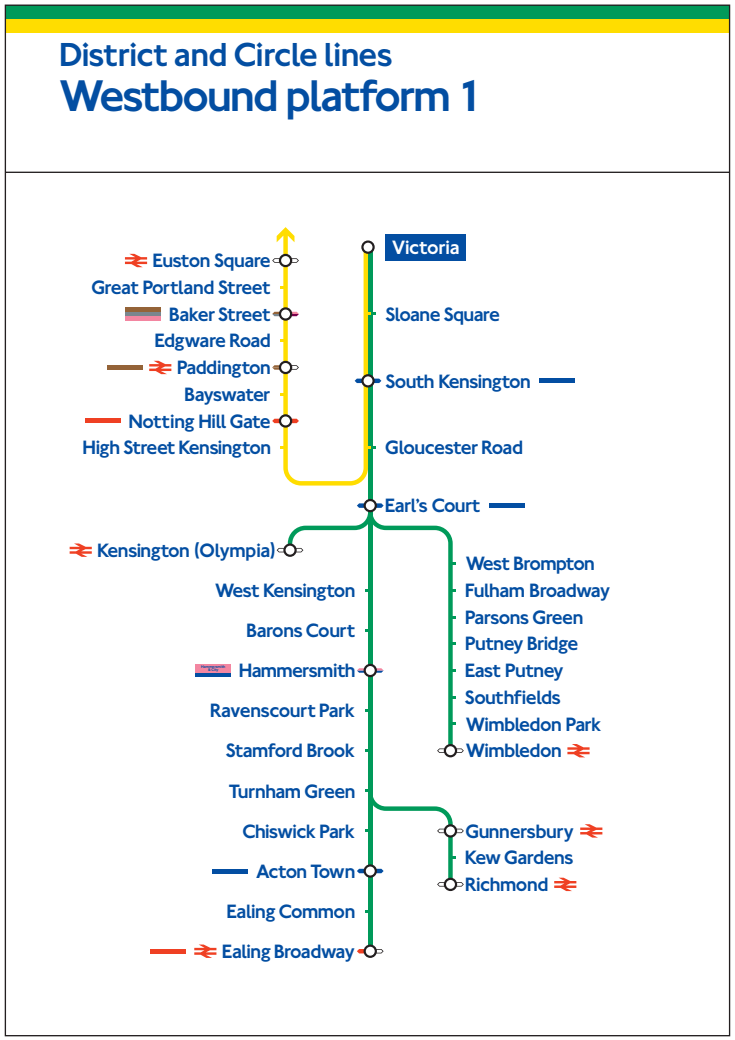
Line diagrams, as illustrated on this page, are destination information and therefore follow the rules for order of information given in section 4.2. The line diagram must be preceded by the line and platform messages.

Line diagrams should be positioned at or beyond bifurcation points, as an aid to journey planning.

Careful siting is essential to avoid congestion in passageways and at the bottom of stairs etc. Where a line diagram is inappropriate for this reason, a sequential list of key destinations may be included with the line information.

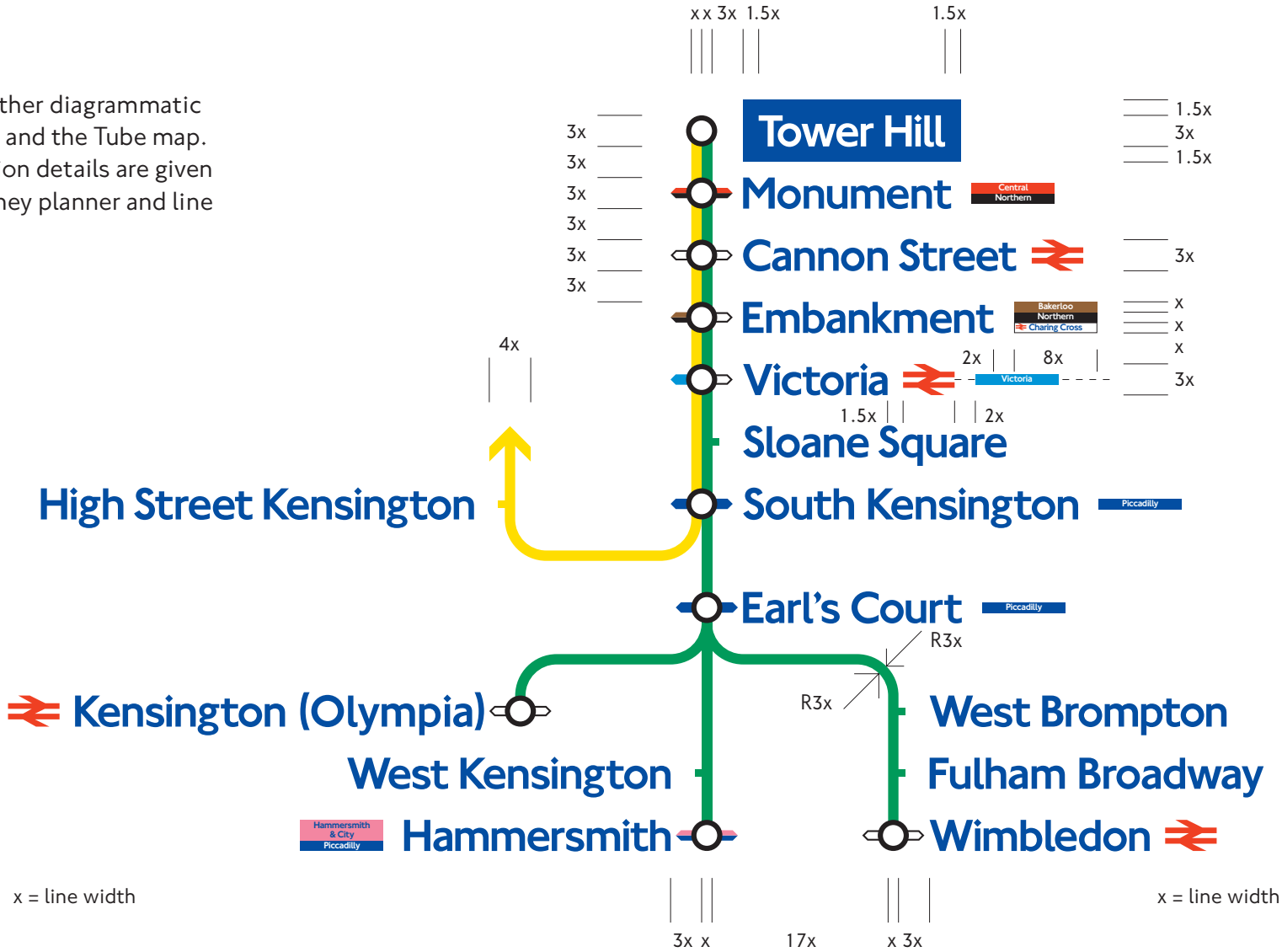
Trackside versions are positioned on the trackside wall, as a means of confirming arrival at the correct platform and orientating the customer, by the station position on the line.

Line and platform messages are separated from the adjoining line diagram by a 3mm light grey line.



4.4.1 Line diagrams – layout details

These rules are consistent with other diagrammatic material such as car line diagrams and the Tube map. More specific layout and application details are given in the 'London Underground journey planner and line diagram standards'.

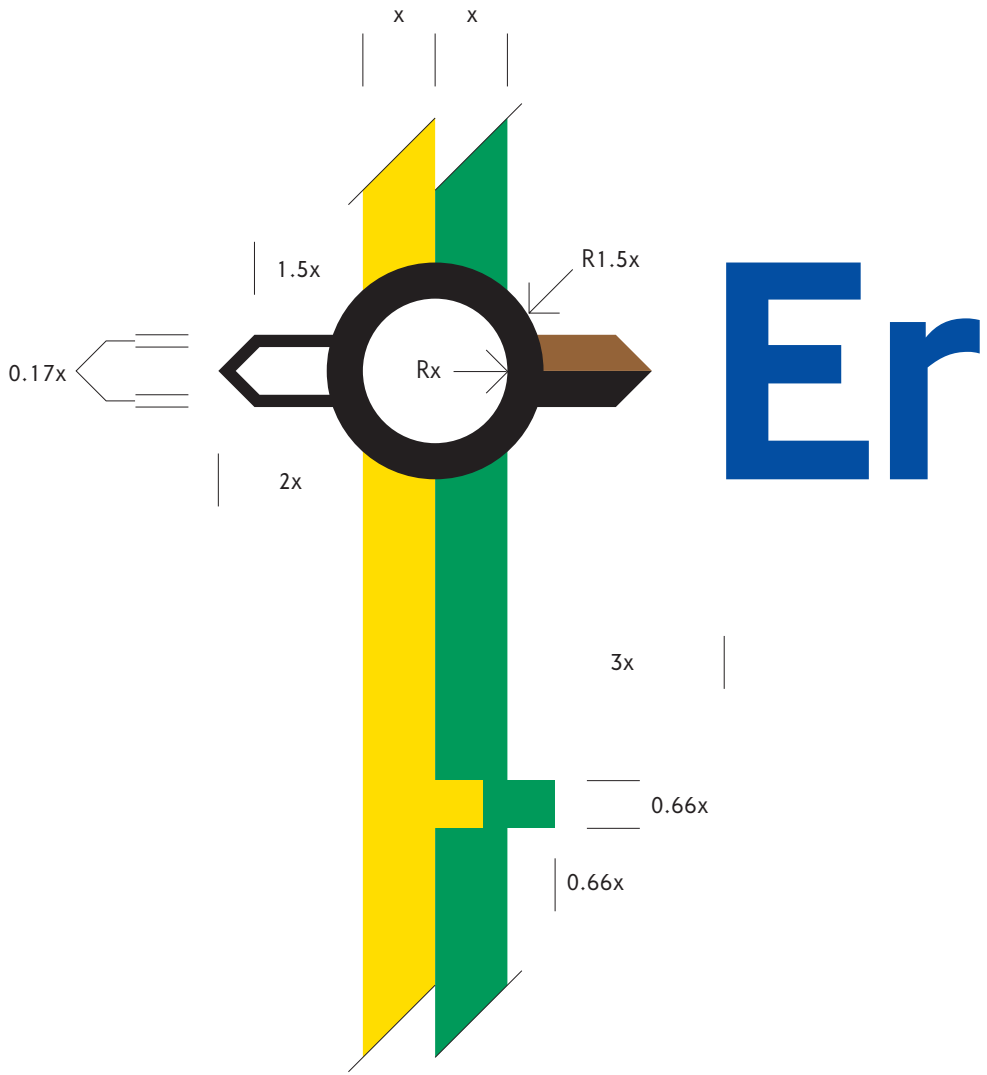


1 of 2

4.4.1 Line diagrams – layout details

Some basic details of geometry lettering and colouring of line diagrams are shown on this page.

All measurements are calculated from the width of the line, defined as x.

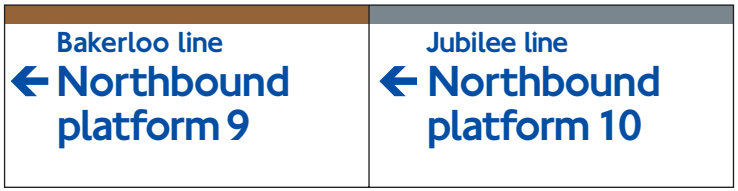


4.5 Platform bifurcation

The next decision point will generally be between two platforms of a specific line. At this stage, compass direction and platform number will be displayed in addition to the line name and colour band. In all cases, line diagrams must be fitted to allow the customer to make the correct choice. Ideally, opposing line diagrams should be positioned as close as possible, so that customers who are looking for their end destination, can view both signs from one position. Where there is more than one entry point to a line, eg switchable routes or multiple escalators, all access points must have full line diagram signs. On open 'island' platforms, free-standing line diagram signs directing to both platforms should be used, which must be orientated to face customers.

4.6 Emphasis of information

Not all stations fit the ‘model’ regarding platforming, and the decision en route to the platform may not always follow the sequence described. In the example shown, the two adjacent platforms are for different lines, but the same direction. To mention only the line names would be inadequate in this situation, and it must therefore be established which part of the message should have the greatest emphasis. In this instance, the term ‘Northbound’ is the element to emphasise with the elements and line spacing following the principles already outlined.



4.7 Key destinations

If there is insufficient space for a line diagram at the platform bifurcation point, or the line diagrams cannot be clearly visible, a platform bifurcation sign with key destinations may be used. At stations where directions are not easily understood by compass points, an overhead sign with key destinations may also be used in conjunction with a line diagram for emphasis. Single key destinations should also be used where it may be considered the clearest communication to customers eg 'Central London' from Wembley Park.

Central line ← Eastbound platform 1 Stratford	Central line Westbound platform 2 → Central London

4.8 Platform confirmation

Platform entrances are key areas of customer anxiety. Arrival at the platform must always be confirmed by appropriate signing, facing customers at or near the entry point.

On tube platforms, this will take the form of a trackplate which is a larger version of the line diagram, following the same map proportions. These signs should be positioned on the trackside walls, slightly offset from each platform entrance to avoid congestion. On platforms with PEDs (platform- edge doors) fitted, these signs may be applied to the inside of the glass, to the same proportions as a line diagram sign, at regular intervals along the platform length.

4.8.1 Platform confirmation – numbers

On open platforms, the platform confirmation should take the form of a suspended sign with line name, colour strip and platform description as shown in figure 1 On island platforms, line diagrams must be clearly visible facing customers on entry. On single platforms, where line direction has already been established, a single line diagram should be wall-mounted close to the platform entry point.

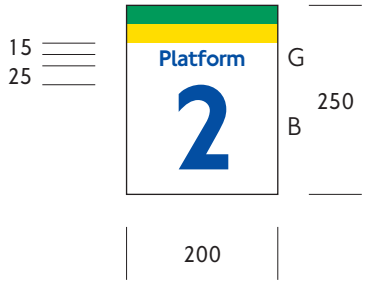
On platforms where services are not dedicated to specific lines, or more than one platform serves a particular direction eg Earl's Court, the use of standard platform confirmation signs is very misleading, particularly when customers may be unaware of another platform serving the same destination sooner. Where platform numbers are displayed on the Dot-Matrix Indicators displays for platform finding, the signing must reflect these priorities. See figure 2

Where platform confirmation signs are positioned on columns, or where there are sightline width restrictions, an upright format sign may be used, omitting the line name/s. See figure 3

1

2

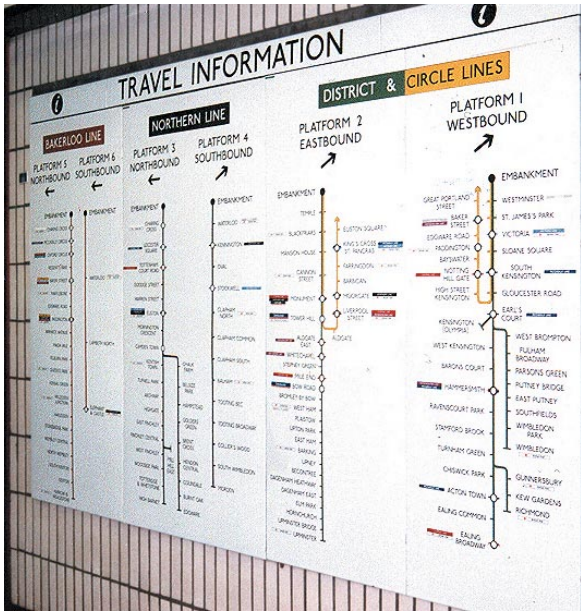
3



4.9 Special cases

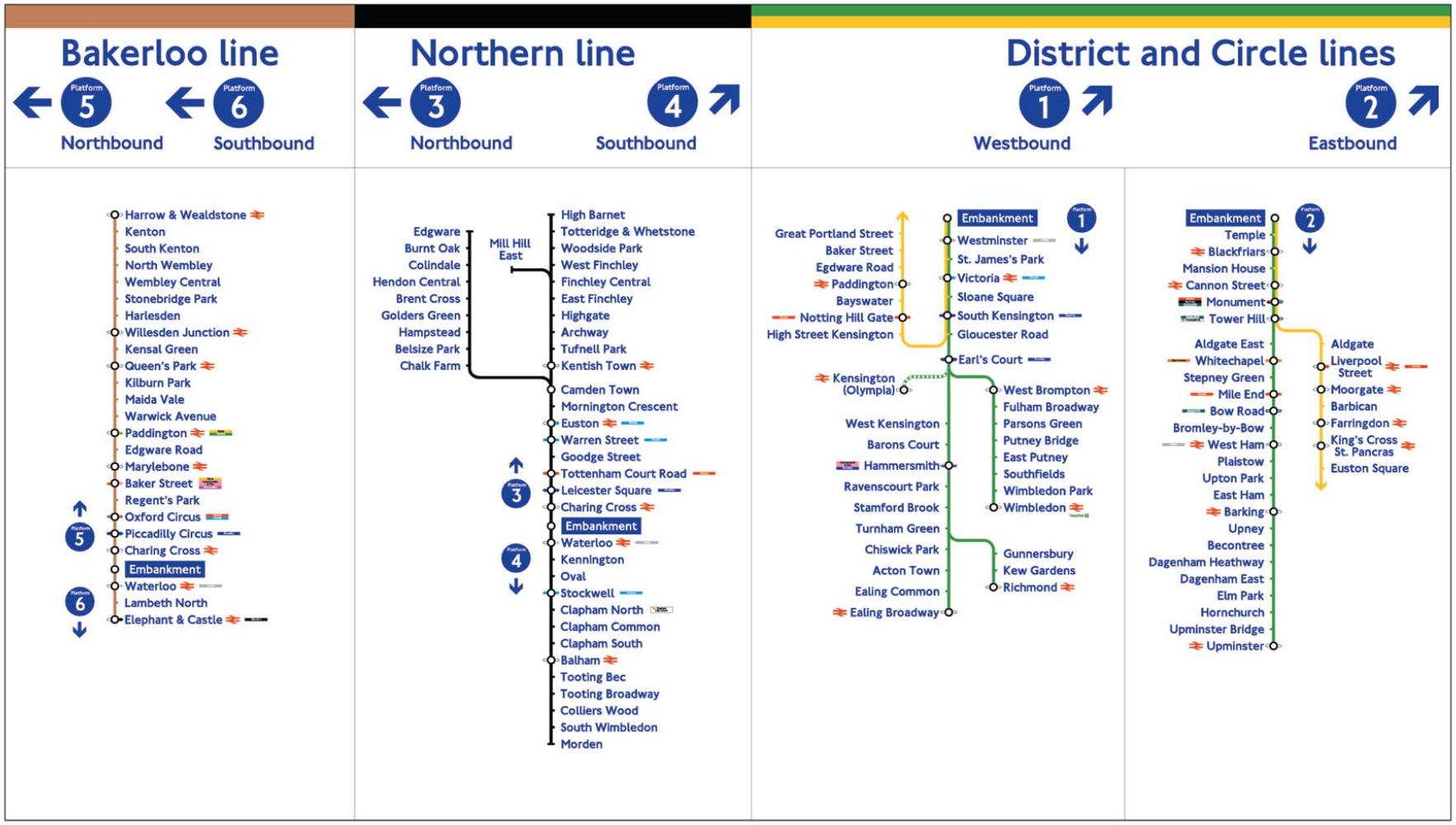
From time to time, situations will occur when the signing standards may be inadequate to provide the full level of information required by the customer. This may be due to the operational need of the individual station, or due to a particular event, which may result in a different emphasis in terms of information elements. In such instances, the customer's interests are primary, and the standards will need to be adapted to suit the individual need of such stations. Such variations can be sanctioned only by London Underground, and all proposed layouts must be submitted and approved prior to implementation.

In the example shown, the level of information on the original signs was felt to be appropriate but visually overpowering. To give a clearer emphasis, a new sign layout was created using the platform numbers in a reversed circle, which was also used as a directional aid on the maps below, thus reducing the number of maps required. It is essential in this instance that the numbered circles be consistently used for sign trails throughout the station.



Old sign appears cluttered with six lines displayed

4.9 Special cases



Rationalised layout using platform numbers to show direction of travel

4.10 Train indicators

Train indicators, although strictly not part of the fixed-sign system, fall into the category of destination information.

For details of all real-time information signs, refer to LUL engineering specification.

5.0 Platform signing

5.1	Station identification from train
5.2	Basic platform roundel considerations
5.3	Platform and trackside roundel sizes
5.3.1	Frequency/height
5.4	Station name sizes
5.5	Types of platform roundel
5.6	Roundel clearance
5.6.1	Restricted roundel sizes
5.7	Existing silhouette roundels
5.8	Frieze – basic considerations
5.8.1	Frieze – appearance
5.8.2	Incorporating frieze within trucking
5.9	Interchange information along platforms
5.9.1	Interchange and exit information
5.9.2	Interchange terminology

Platform signs are those which identify a station to the customer on arrival by train. These appear on the platform as either wall-mounted or free-standing signs. On platforms which are underground, a smaller version of the platform sign is also required on the trackside wall.

Particularly on tunnel walls, they are so closely associated with architectural features, they affect and are affected by their surroundings, although to a lesser extent than is the case with external signs, they must also respect historic and special architectural considerations from time to time.

However, it should be remembered that their primary function is to inform in a very difficult situation. When a train draws into a station, there is a very limited amount of time in which to recognise the station name, which is always a cause of customer anxiety.

5.1 Station identification from train

On platform and trackside walls, standard roundels must be fitted at the correct frequency and height, to enable customers to see the station name clearly from all locations on the train.

On all underground platforms a continuous frieze should also be fitted, displaying the station name and directions to the nearest ‘Way out’.

5.2 Basic platform roundel considerations

The basic rules for platform roundels follow the principles established in section 1.0.

The rules in sections 1.1.3 and 1.2 concerning background areas and background colours are of particular relevance.

As with external roundel signs, the preferred version for platforms is a panel sign with a white background of the recommended proportions, which gives a protected area for the roundel.

Silhouette versions are also available for use in special circumstances, see section 1.1.2, and in such cases, care should be taken to observe the rules on background colour given in section 1.1.3.

5.3 Platform and trackside roundel sizes

Platform, or station name, roundels follow the principles established in section 1.0.

The preferred size for a platform roundel is 1250 x 1250mm. A trackside roundel is half the size of the preferred platform roundel. If a roundel of any other size is used, it must be of the exact proportions established for the basic form of Underground roundel.

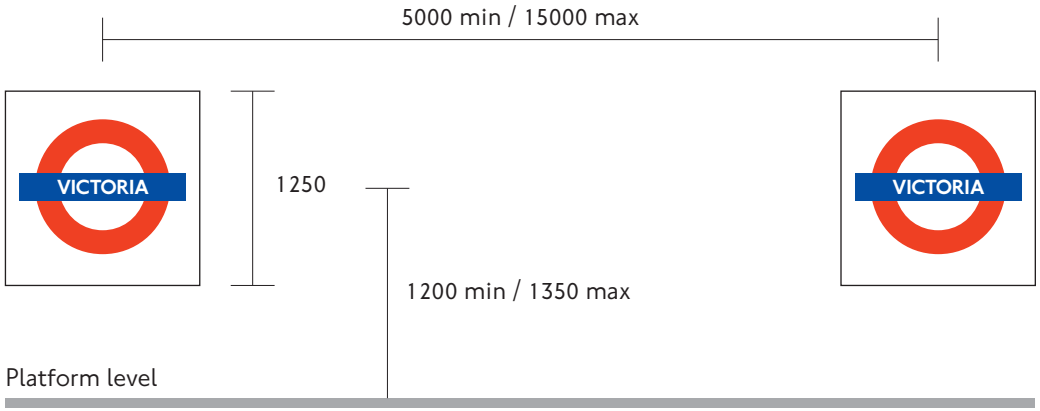
The preferred sizes for platform and trackside silhouette roundels are 1000mm diameter and 500mm diameter approximately. Frame sections used decrease in steps proportionally to diameter. Centres on all silhouette roundels should be open (as opposed to white), allowing the wall finish to be visible.

5.3.1 Frequency/height

It will not often be possible to space roundels evenly along the length of a given platform. However, the minimum and maximum distances between roundels shown on this page should be adhered to, to ensure that sufficient identification of the station name is given without overcrowding the platform/trackside walls.

Frequency of trackside roundels is easier to maintain consistently but, even so, minimum and maximum distances have been fixed in order to take into account different tunnel wall construction methods, poster sites etc.

Due to the varying height of tube and surface stock, maximum and minimum heights are given for trackside roundels. In practice, roundel height should be based on the rolling stock using the platform, the bottom of the sign aligning to the bottom of the train window.



Trackside roundels

5.4 Station name sizes

The size of the lettering for the station name is determined as shown opposite. The white box defines an area within the bar and the name must never exceed the height or width of this area.
Names must appear on one line only.

5.5 Types of platform roundel

Because the nature of the platform environment is so variable, it is not possible to recommend one standard type of platform roundel.

Roundels may sometimes be applied to integrated, curved, vitreous enamel wall panels, appear as curved or flat panel signs applied to tunnel walls, or be free-standing on land or open-air platforms.

The photographs opposite show the main types of roundel panel sign:

1. Single-sided roundel for flat wall mounting
2. Single-sided curved roundel for mounting on curved walls

1

2

5.5 Types of platform roundel

3 Double-sided free-standing flanged roundel for open platforms

4 Single-sided silhouette roundel for flat or curved walls

5 Double-sided silhouette roundel for open platforms

3

4

5

5.6 Roundel clearance

Although it may not always be possible to position signs in ideal locations, due to architectural or other considerations, certain parameters should be followed as closely as possible.

In cases where the roundel is to be applied to existing panels, for example vitreous enamel panels which form an integral part of the wall cladding or glass panels in existing frames, then the minimum distances as established for the panel sign should be respected. This may result in more space above or below, or to either side of the roundel, which should then be visually centred vertically and horizontally in the space available, as shown opposite.

5.6.1 Restricted roundel sizes

One possible justification for use of a silhouette roundel is that in a restricted space situation, for example on a station column, use of the panel version would reduce the size of the roundel itself, and therefore also the size of the station name lettering.

5.7 Existing silhouette roundels

In some cases, roundels appear as integral parts of fixed structures, and to remove or replace them would involve unjustifiable expense.

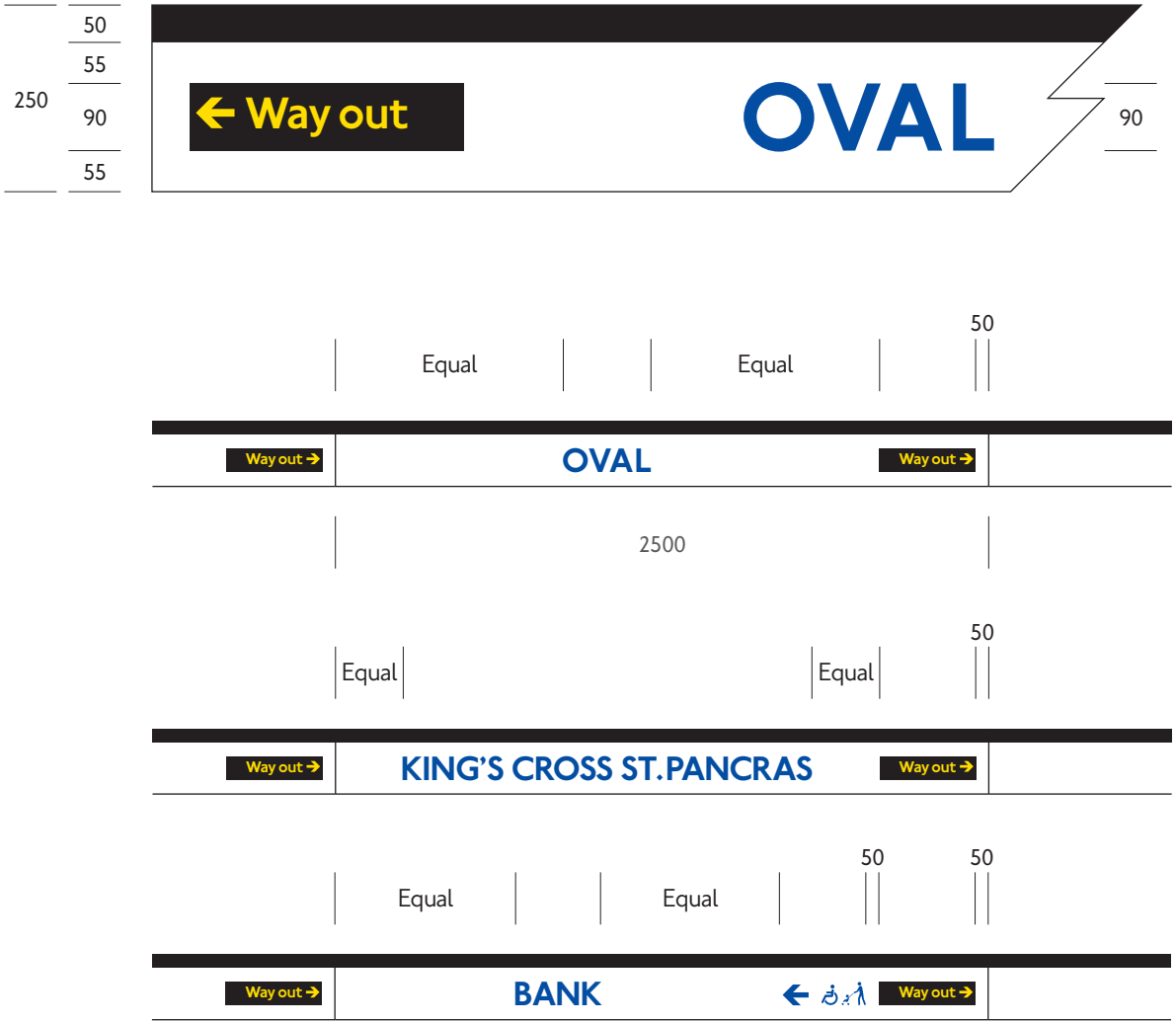
In heritage situations where the colours and lettering are reasonably compatible, it may be judged best simply to renovate the item. It is otherwise required to replace deteriorated or incorrect panels with new ones of the correct style, leaving the framing structure intact, as illustrated opposite.

5.8 Frieze – basic considerations

The frieze is an important back-up system of station identification, and should be installed at all sub-surface and tube stations. Care must be taken to ensure that its implementation is correct and consistent. The frieze plate must be 250mm deep, with the graphic elements dimensioned as shown opposite. The frieze run should be fixed at a constant height of 2.2 metres from platform level to the bottom edge.

Station names should appear on each full panel. For long station names, to avoid visual confusion, the station names may appear on every other panel. However, where a panel is installed without the station name, the 'Way out' patch will remain.

Where lift access is via a different cross-passage from the main 'Way out', the standard MIP symbols must be displayed adjacent to the 'Way out' patch. Such symbols are required only where direction to the lifts deviates from the main 'Way out'.



5.8.1 Frieze – appearance

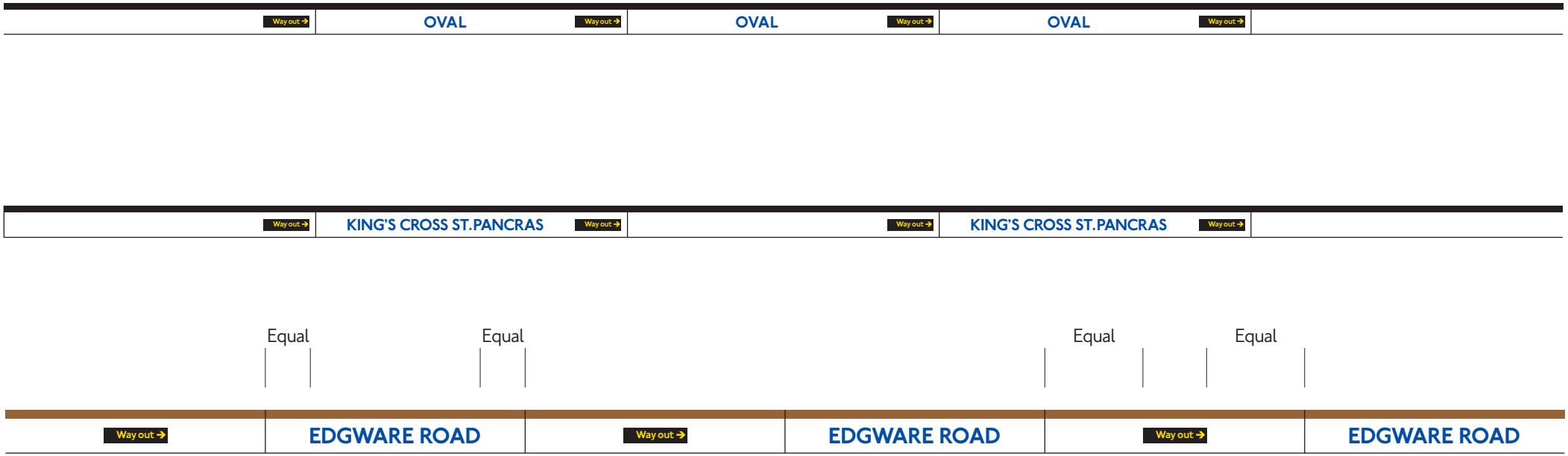
A standard panel width of 2.5m has been established which can be used in long runs, with special 'infill' panels at either end.

Example:

Length of run = 21.5m
Standard length x 8 = 20m
2 special 'infill' panels of 750mm = 1.5m

In this example the 'infill' panels would be blank except for the line colour.

Shorter panel widths may be used in exceptional cases, for example on curved platforms. In such cases the station name and 'Way out' patches should be centred within panels as shown.



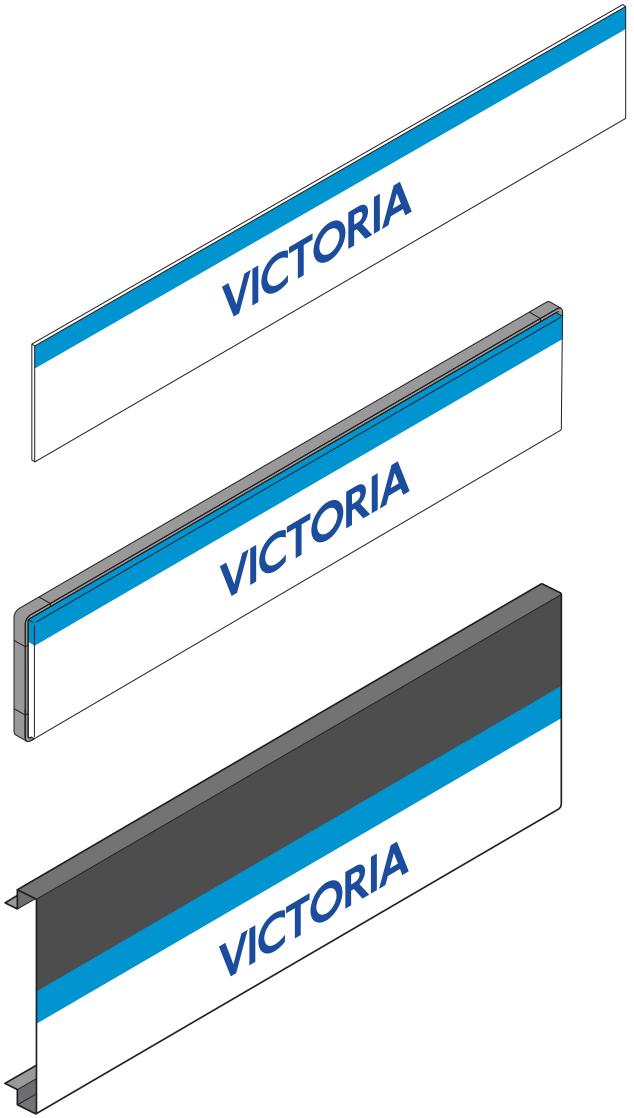
5.8.2 Incorporating frieze within trucking

Where no obstruction, for example ducting, is present, the frieze is normally constructed as a tray section with a return which matches that of the directional and panel roundel signs.

The frieze may be used as flat plate only for application to existing ducting. In both cases the finish is vitreous enamel.

The frieze depth is always 250mm.

Where an existing ducting element is of a greater depth, the frieze is applied to the lower edge.



5.9 Interchange information along platforms

Having alighted from the train, customers should be given immediate directions to any interchanges directly served by the station. The siting of interchange information above the roundel capitalises on the visual focus of the station name, and if applied in a consistent manner, will ensure customers know where to look for such information.

Where possible the signs should be sited directly above the roundel sign, but where space is insufficient, signing may appear above the frieze centred on the station name and of matching width.

5.9 Interchange information along platforms

The interchange signing follows the graphic principles established in the basic elements section. On platform walls the signing will generally be sited directly above the station name, or above the frieze. In exceptional circumstances, the information may be incorporated into the frieze, such as on the recent Jubilee line stations, where the friezes are illuminated, and signing above would have appeared dark in comparison.

5.9.1 Interchange and exit information

On open platforms with panel roundels, the interchange information should be integrated into the roundel panel, albeit as an additional area at the top of the sign, the roundel height and background being unaffected. The same principle may be adopted when applying 'Way out' information.

5.9.2 Interchange terminology

When directing to interchange facilities other than the other Underground lines, consistent terminology is vitally important to ensure customers understand the network being signed. Only core networks should be used on directional signing, as these can be easily understood by the customer.

Train operating company names should not be used, except where direction between operators bifurcates within the station and no alternative exists. The examples opposite show the correct terminology to be adopted for typical interchange situations.

1. If space is limited, the term 'Station' may be omitted
2. Within a major national railway station 'National Rail' may be used to differentiate from other rail services
3. In some instances a destination may be more easily understood than the network name
4. Where specific platforms serve the rail network, platform numbers may be the clearest description

1

2

3

4

6.0 Exit from platform

6.1 Way out from platform
6.2 Way out from platform – Principles
6.3 Directing to several cross-passages
6.4 Directions to lifts
6.5 Platform to ticket hall
6.6 Maintaining clear sightlines

At all stations it is essential that during both normal operation and during emergencies, customers can always clearly see the location of the nearest exit (or Emergency exit where present).

It is a mandatory requirement at sub-surface stations that all platforms must have sufficient illuminated ‘Way out’ signs so as to be clearly visible from all areas of the platform. While the frieze incorporates ‘Way out’ signing, this is not illuminated and should be thought of as a supplement and not a substitute for projecting illuminated ‘Way out’ signing.

6.1 Way out from platform

The ‘Way out’ sign should display only information that is necessary for customers to be guided quickly from the platform. At simple stations, this signing will display a large ‘Way out’ patch only. At interchange stations, even though the route to the interchange facility may be through the same passage from platform, the interchange/s must also be shown on the primary ‘Way out’ signs, ensuring customers do not wrongly believe there may be a separate, dedicated exit point.

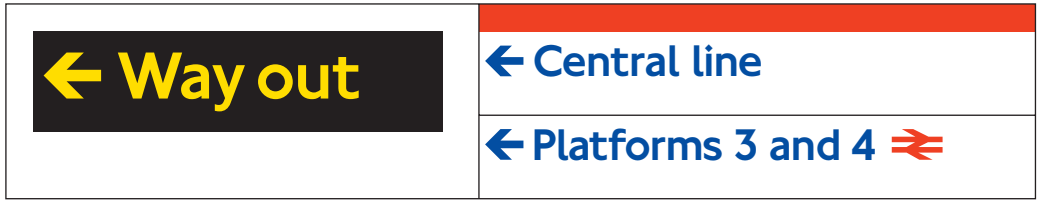
Where stations have level access to exit or interchange using lifts via a separate exit, this route must be clearly apparent from the main exit point on the platform. Where two separate exits exist from the platform leading to separate street locations, sufficient information must be included on the exit sign to enable customers to make an informed decision, using primary, key, designated street or place names. This is dealt with in more detail in section 8.0, ‘Exit from station’.

6.2 Way out from platform – principles

The principal ‘Way out’ indication will normally be by an illuminated sign placed at right angles to the track. Details of this sign are given in section 1.7. The sign may also include directions to other lines. Details of this type of sign are given in section 1.14.

When combining other directions, care must be taken to ensure type sizes are visible from correct viewing distances. Generally the ‘Way out’ panel should be B or C size, D size only being used in exceptional circumstances, where several other elements are to be displayed. Where additional directions are combined with the ‘Way out’ panel, these should be placed to the side, to keep the sign to a longer, shallower format, thus helping maintain clear sightlines, refer to section 6.6.

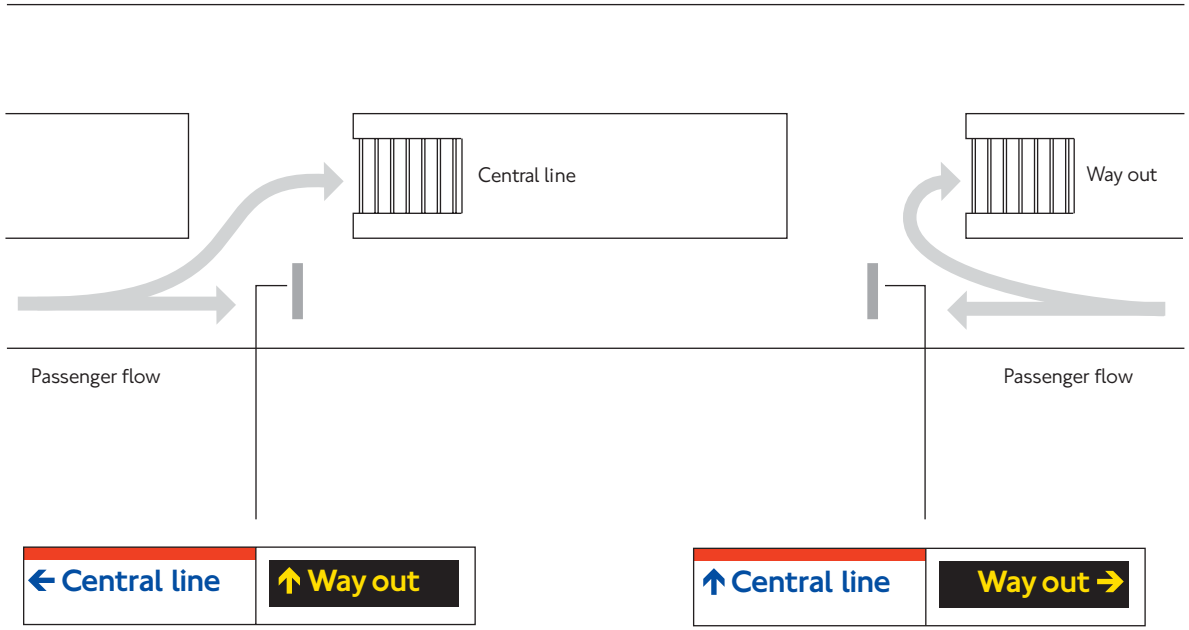
When smaller type sizes are used, additional repeater signs should be considered at strategic points along the platform. Where overbridges cause obstructions, single-faced signs should be fitted to the sides, aligning the bottom edge.



6.3 Directing to several cross-passages

Where there are several routes from platform to exits or interchange, these may not be immediately apparent from all areas of the platform. In this instance the junctions between platforms and cross-passages should be treated as decision points between routes, and signing should display both the route served by the cross-passage, and the route to the other cross passage/s further along the platform.

This simple principle is demonstrated in the diagram opposite.



6.4 Directions to lifts

Where stations have level access between platform and street or interchange, the level access route may deviate from the main route at several points between levels. From platforms, the level access route to the exit or interchange may be via a different cross-passage from the main escalator route, and lift pictograms and directions must be incorporated, with supporting text as required, replaced with 1 and 2

When directing to interchange lines where there is level access only to certain lines, this must be reflected in the signing, the symbols being positioned in association with the accessible line only.

1

Front

2

Reverse

6.5 Platform to ticket hall

Having left the platform by the correct exit, customers should be able to follow a trail of frequent consistent signs to the exit or interchange line as required. At each decision point en route, clear signing must be present, orientated to face the customer, giving sufficient clear directions to enable correct decisions to be taken, without unnecessary information which may confuse. If the station has only one exit, there is no need to mention the street names at this point, it will merely make the sign layout more cluttered, possibly affecting the text size.

All escalators must have clear directions to enable customers to see clearly the areas served without slowing.

At each decision point within sub-surface Underground stations, there must be an illuminated 'Way out' sign (or Emergency exit where applicable) clearly visible in case of an emergency evacuation. Long interchange subways should also have exit information present in line with the viewing distances established within the basic elements section.

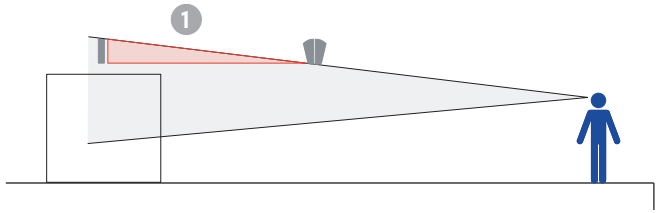
6.6 Maintaining clear sightlines

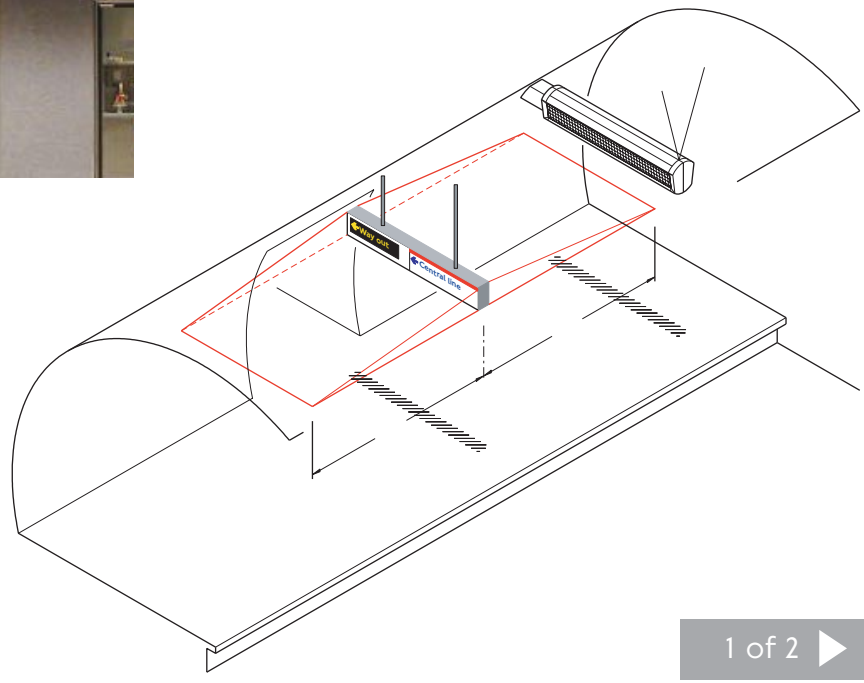
Underground platforms are an increasingly competitive environment in terms of the signing and equipment necessary for safe operation of the railway. While signing is essential for customers to find their way safely from platforms to the correct exit, or evacuate the station in the event of an emergency, the positions of cameras and platform train indicators must be carefully considered.

A hierarchy of platform signing and equipment has been developed, to ensure each element can be positioned within set zones within the platform section, and at set distances depending on height, so as to be visible and operate successfully.

Elements such as exit signs are fixed in their position along the platform by the actual location of the exit. Other elements such as train indicators, have more flexibility in their optimum position, and may be resited if clashes occur. The diagram on this page indicates the principle of sightline exclusion zones around signs, which must be maintained when installing or resiting any platform signing or equipment.

1 Exclusion zone for 'Way out' sign.





6.6 Maintaining clear sightlines

A table of minimum distances is shown, based on viewing distance and equipment height from platform. While the minimum headroom shown is below the desirable minimum, this can only be used in extreme circumstances under a concession from London Underground. The normal desirable minimum headroom for platforms is 2.5m. For full details and conditions refer to the LUL Signing and Equipment Hierarchy Standard E3444.

Typical arrangement

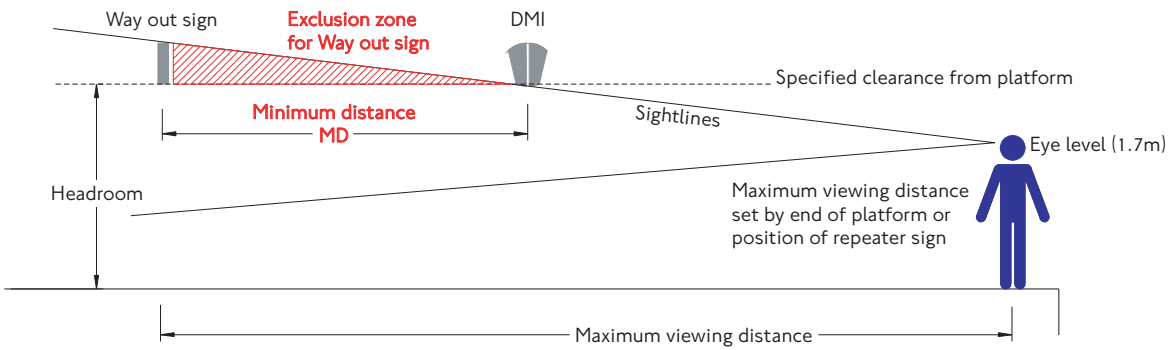


Table of minimum sign/equipment spacing

Common headroom in metres	10	20	30	40	50	60	70	80	90	100
3.0	2.1	4.2	6.3	8.5	10.5	13	15	17	19	21
2.9	2.2	4.5	6.7	9	11	13.5	15	18	20	22
2.8	2.4	4.8	7	9.5	12	14	16.5	19	21	24
2.7	2.6	5	7.5	10	12.5	15.5	18	20.5	23	26
2.6	2.8	5.6	8.4	11	14	16.5	19.5	22	25	28
2.5	3	6	9	12	15	18	21	24	27	30
2.4	3.3	6.5	10	13	16.5	20	23	26.5	30	33
2.3	3.6	7.3	11	14.5	18.5	22	25	29	33	37

Maximum viewing distance in metres

Sign height = .35m
Eye level =1.7m

7.0 Emergency exits

7.1	Regulations
7.2	Pictograms
7.3	Types of emergency sign
7.4	Combining signs
7.5	Emergency exits for wheelchair users
7.6	Switchable exit signs
7.7	‘No entry’ signs
7.8	Special cases

Regulation 7 of the Fire Precautions (Sub-surface Railway Stations) Regulations states that:

‘Every doorway or other exit affording a means of escape from the station premises in case of fire or giving access to such a means of escape, including the means of exit in ordinary use by members of the public, shall be distinctively and conspicuously marked by a notice indicating that it is an ordinary means of exit or (as the case may be) an emergency exit from the premises.’

This regulation must be implemented in all London Underground sub-surface stations. To this end all existing ‘Way out’ signing within stations should be retained with the addition of emergency signs as necessary. The different types of emergency sign, with examples of their application, are detailed in this section.

When planning signing for any station with emergency exits, the LUL Fire Systems Engineer and the LFEPA must be consulted.

7.1 Regulations

‘Emergency exit’ signs must be used only to indicate a designated safe exit. For most exits, standard ‘Way out’ signs must be used.

Only designated emergency exits (leading to a safe area) may be marked as such, and normal exits (generally leading to ticket halls) must be signed as ‘Way out’ as they are not deemed a guaranteed ‘safe’ exit.

This is outlined in regulation 4 (7) of the Fire Precautions (Sub-surface Railway Stations) Regulations 1989. One of the lessons learnt from the King’s Cross fire is that emergency exits must be separate routes leading to an independent safe area. Normal ‘Way out’ routes must not be signed as emergency exits.

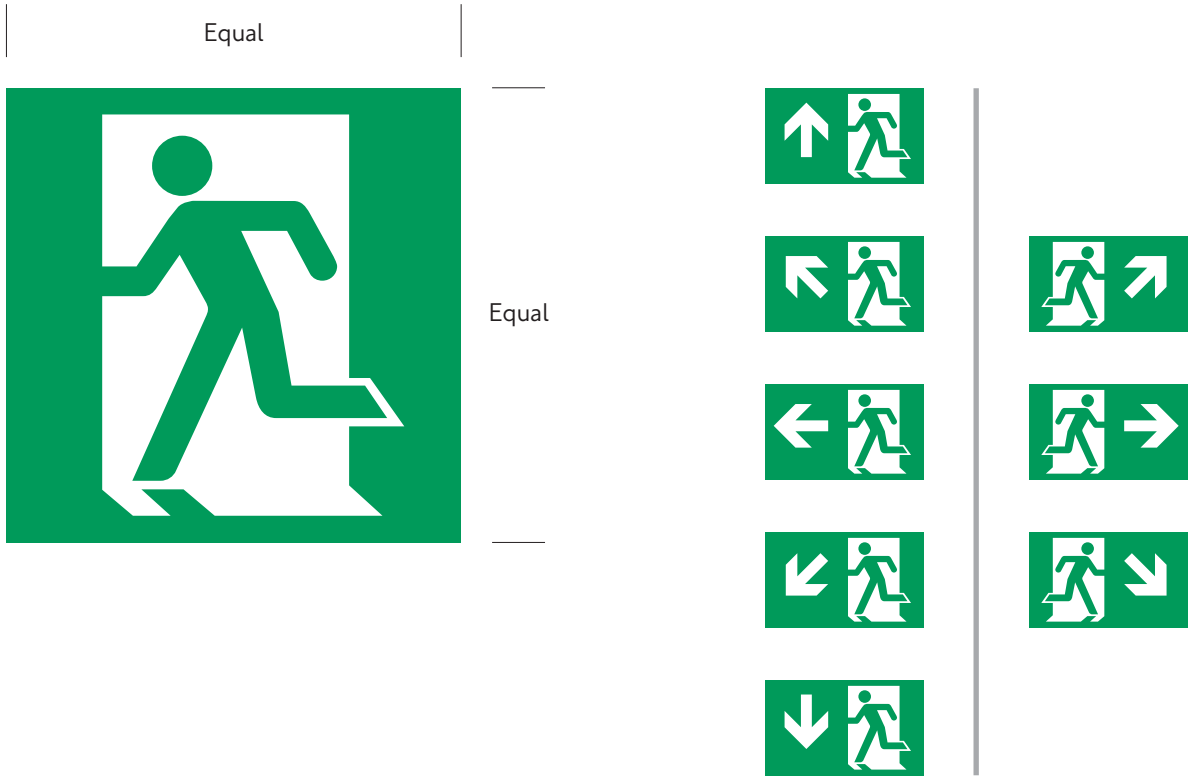
7.2 Pictograms

Pictograms serve as recognisable pictorial representations which can make signs more conspicuous and more easily comprehensible, especially by those who cannot read or understand English. All ‘Emergency exit’ signs should carry the approved ‘running man’ pictogram.

The specified proportions of this pictogram are fixed. The imagery should not be altered except in size and orientation to fit in with the existing Underground sign system.

When combined with directional arrows, the orientation of the pictogram should be altered as illustrated. The pictogram should always be reproduced in Underground green and Underground white. Colour references are given in section 1.2.

The Standard LUL ‘running man’ symbol is the British Standard 5499 version.



7.3 Types of emergency sign

The ‘Running man’ pictogram should be combined with an accompanying message and directional arrows within a patch of fixed proportions. The pictogram, lettering and directional arrows should be Underground white reversed out of an Underground green patch. Colour specifications are given in section 1.2.

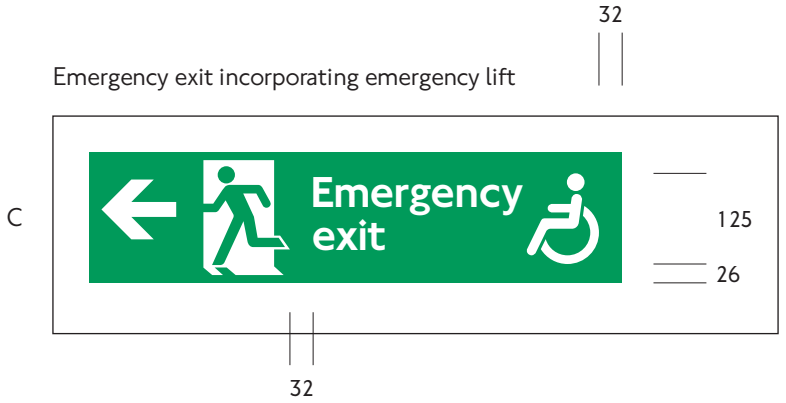
Three types of ‘Emergency exit’ sign are normally used. The message should always be ranged to the pictogram direction, as illustrated.

‘Emergency exit’

Signs carrying the message ‘Emergency exit’ should be used to designate a station exit not normallyused as a customer ‘Way out’. Where necessary, additional ‘Emergency exit’ (repeater) signs with a directional arrow should be installed, to provide a clear and unambiguous route from the point where the ‘Emergency exit’ route deviates from the normal ‘Way out’ route.

These signs must be used in conjunction with emergency door signage, refer to section 10.0.

From platform level, all ‘Emergency exit’ signs must be illuminated, with the exception of wall-mounted repeater signs. At any decision point an illuminated sign must be used.



7.3 Types of emergency sign

‘Exit only in emergency’

Where passageways are not designated ‘Way out’ routes, but could be used as an exit in the event of an emergency, they should be signed ‘Exit only in emergency’. This may be used at the point where entry passage joins the platform, in place of ‘No exit’ signs.

7.3 Types of emergency sign

‘Emergency stairs’

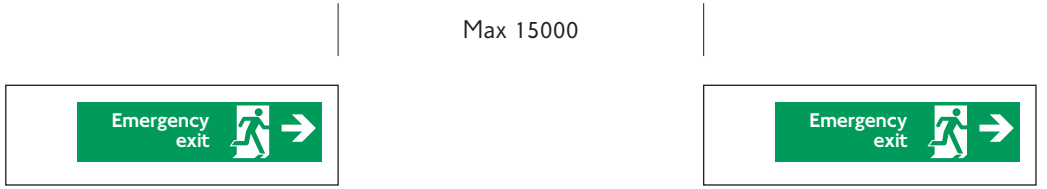
Signs carrying the message ‘Emergency stairs’ should be used to distinguish emergency exit routes which incorporate stairs not normally used as part of a customer route. All stations equipped with spiral stairs should be signed ‘Emergency stairs’ at the point where the emergency exit deviates from the normal ‘Way out’ route to the bottom of the stairs. A further sign (either ‘Emergency exit’ or ‘Way out’ as appropriate) should be provided at the top of the stairs directing customers out of the station.

7.3 Types of emergency sign

The same rules governing positioning of directional signs apply to emergency signs. To provide guidance within areas not normally used by customers, and give reassurance, emergency exit signs should be repeated at minimum distance intervals of 15m. Repeater/reassurance signs on platforms or exit routes may be non-illuminated, but if the main 'Way out'/'Emergency exit' signs are switchable, the repeater/reassurance signs should be illuminated.

When determining the size of an emergency exit sign, a balance should be achieved between optimum legibility and practicality. Available space and combination with existing signs, see section 7.4, will be determining factors in many cases.

The table opposite should be used in conjunction with the viewing distance chart, see section 6.6, to determine the size of an emergency exit sign patch used within a particular station environment.

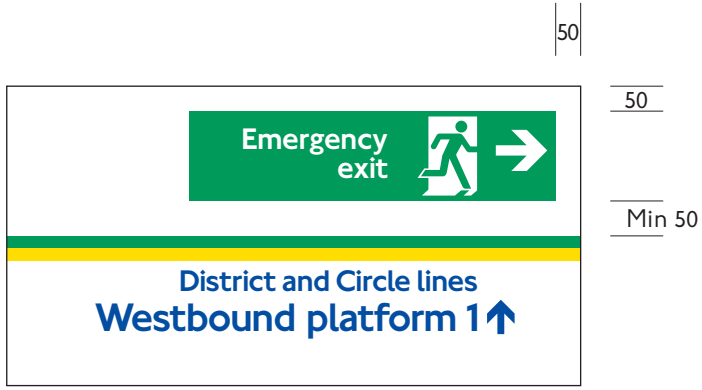


Patch size		Arrow size	CH	x
B	980 x 240	110	55	40
C	735 x 180	83	41	30
D	490 x 120	55	28	20
E	368 x 90	41	21	15
F	246 x 60	28	14	10
G	185 x 45	21	10	7

7.4 Combining signs

Emergency exit signs may be combined with other signs only at the point where an emergency exit route deviates from the normal 'Way out' route.

Signs may be combined in horizontal or vertical format. Information on accompanying signs should align as illustrated. In a situation where sign cases to current standards exist, separate sign cases can be used for emergency signs. When 'Emergency exit' and 'Way out' signs are combined, they must be switchable, see section 1.11. 'Running man' pictograms should not be combined with 'Way out' patches.



Align baseline of Emergency exit with baseline of type

Align cap height with top of patch

7.5 Emergency exits for wheelchair users

Where emergency exits have fire-secure lifts and stairs, the signing should be as described in the opening pages of this section, incorporating the running man and wheelchair symbols. Where there is an emergency lift specifically for wheelchair use, but it is accessed from the platform by a separate route from the main 'Emergency exit', the term 'Emergency lift' should be used as required on platform 'Emergency exit' signing. Such a route must not be signed using the running man symbol, as this may result in misuse by able-bodied evacuees believing incorrectly that the lift should be used as the primary evacuation route.

Where a platform has 'Emergency exits' without provision for wheelchair use, wall-mounted notices should be fitted at strategic points along the platform, with text clearly explaining any emergency procedures.

Front

Reverse

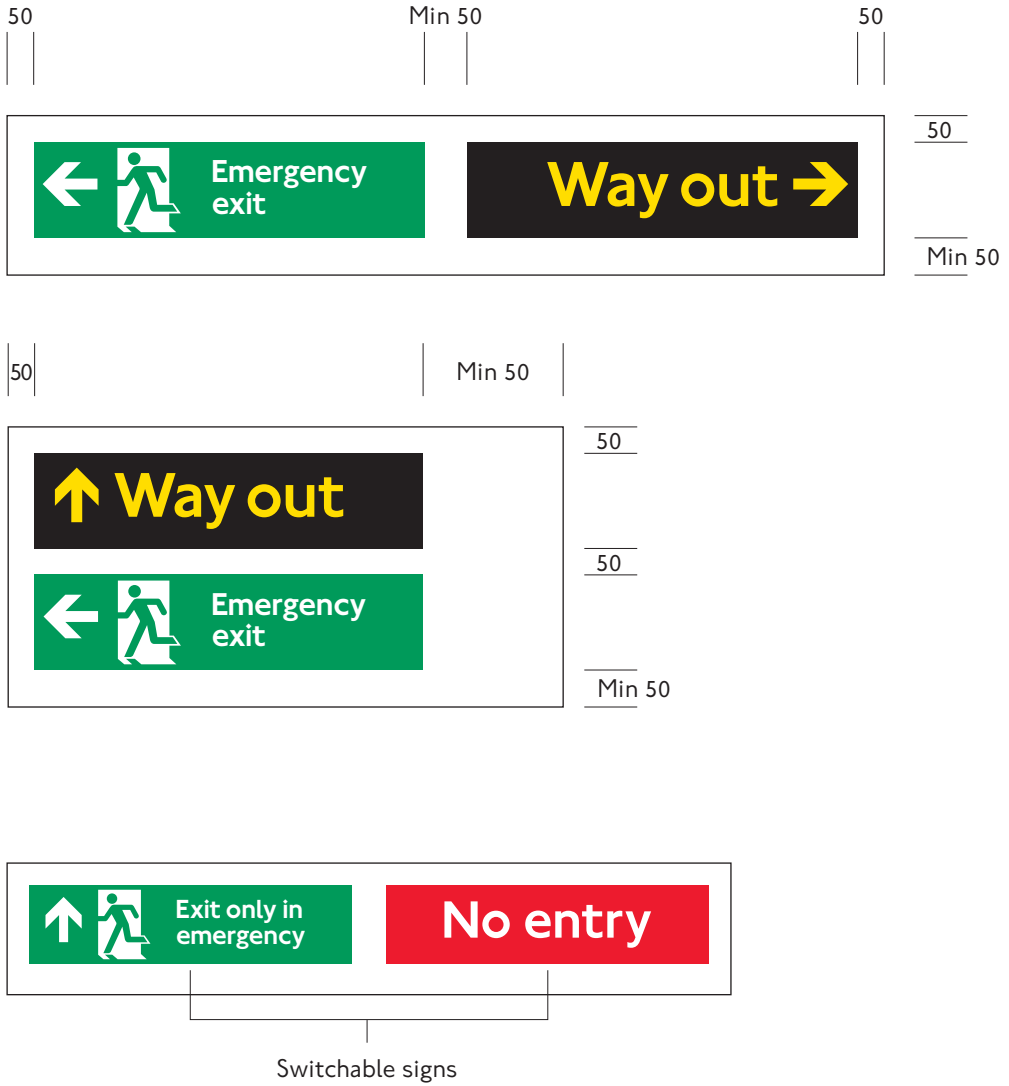
7.6 Switchable exit signs

Switchable signs may be used in a variety of modes to indicate status changes in an emergency situation. Examples are shown of different types of switchable sign, with typical positioning within station environments.

The first example shows a horizontally combined 'Way out' and 'Emergency exit' sign. 'Way out' and 'Emergency exit' signs should be combined only at the point where an emergency exit route deviates from a normal 'Way out' route. In such a case the sign should be switchable in an emergency situation, as shown. The second example shows a vertically combined sign. This arrangement should be used only where there are space restrictions.

The third example illustrates the use of a 'secret' emergency exit sign. Where an 'Emergency exit' route leads directly to a 'down' escalator, a switchable 'No entry'/'Exit in emergency only' sign should be used. In an emergency situation, provided the escalator has been stopped or reversed, the sign can be switched to 'Exit only in emergency' to direct customers to an 'Emergency exit' or normal 'Way out'.

Where a sign needs to be switchable this can be done locally, but provision must be made for a centrally controlled switching/routing system at stations where an operations room exists, or is planned.



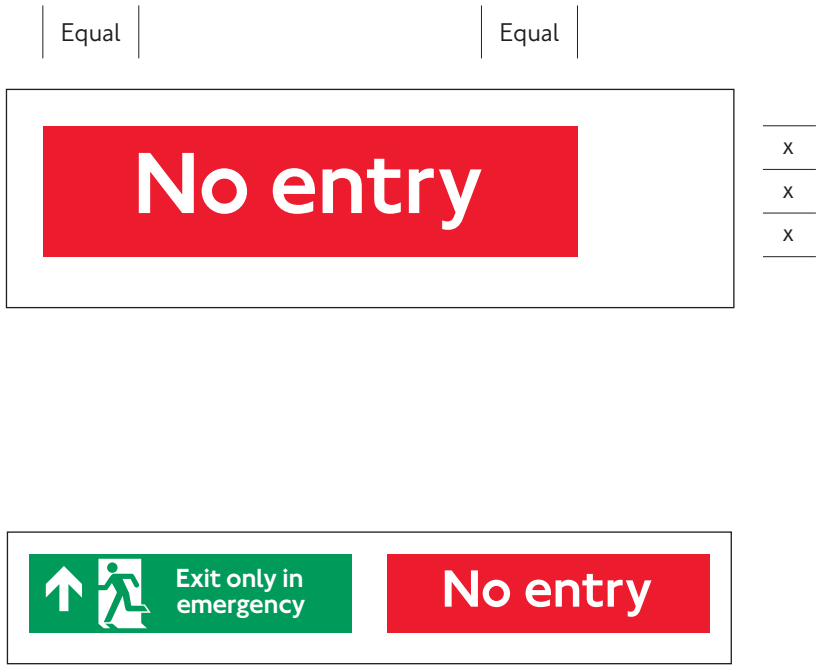
7.7 ‘No entry’ signs

Emergency ‘No entry’ signs differ in purpose, design and application from normal directional ‘No entry’ signs. Emergency ‘No entry’ signs have Underground white lettering reversed out of an Underground safety red patch of fixed proportions. Reference for these colours can be found in section 1.2.

‘No entry’ signs should be illuminated and switchable. When an ‘Emergency exit’ route leading directly to a normal ‘Way out’ incorporates a ‘down’ escalator, a switchable ‘No entry’/‘Exit only in emergency’ sign should be utilised. This ‘No entry’ sign should be switched to ‘Exit only in emergency’ only when the escalator has been stopped or reversed, in an emergency situation.

‘No entry’ signs should be applied in the standard sizes given. The table should be used in conjunction with the viewing distance chart, section 6.6, to determine the correct size within a particular station environment.

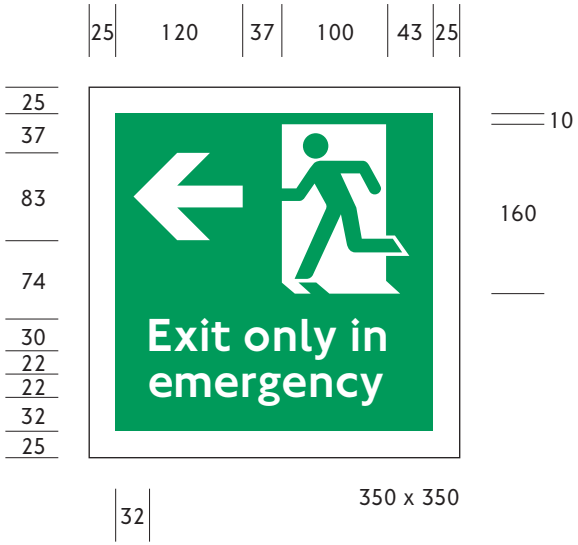
Patch size		CH	x
B	980 x 240	110	80
C	735 x 180	83	60
D	490 x 120	55	40
E	368 x 90	41	30
F	246 x 60	28	20
G	185 x 45	21	15

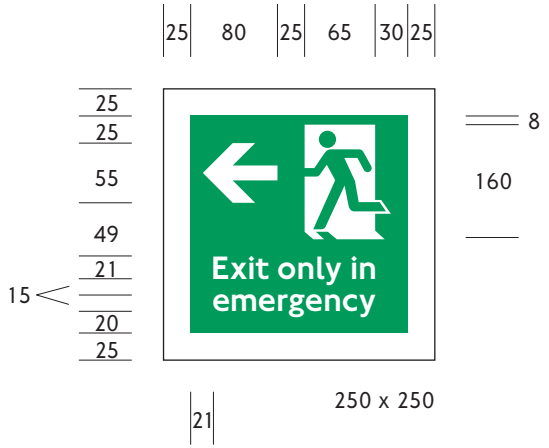


7.8 Special cases

Alternative format signs

In particular circumstances, an alternative format emergency exit sign may be used, for example in cross-passages where a site area is restricted or where line of sight is restricted by columns. The signs may be used in two standard sizes, as illustrated. These types of sign should be illuminated only when it is not possible to position them close to a dual-fed light. The preferred option is for these signs to be non-illuminated.



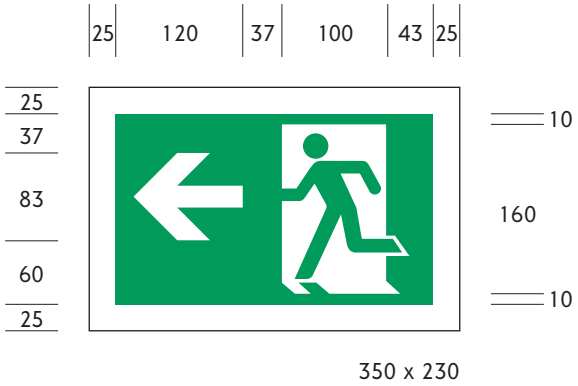


Emergency exit repeater/reassurance signs

In situations where a site area is restricted, emergency exit signs may be used without the accompanying message, in the standard size illustrated. This sign must be used as a repeater/reassurance sign only between the point where an emergency exit route deviates from a normal 'Way out' route, and the emergency exit itself.

This type of sign should never be illuminated.

Note: Where signs are not illuminated, levels of incident illuminance must be in accordance with LUL's engineering standards.



7.8 Special cases

Non-illuminated signs

In situations where it is not essential to illuminate an emergency exit sign, eg a change in passage direction, a non-illuminated version may be used. Two standard sizes of non-illuminated sign are available, as illustrated. 'Emergency exit' signs at key locations where changes of direction occur, such as on platforms or in major circulating areas, must be illuminated. Non-illuminated 'Emergency exit' signs must not be combined with illuminated 'Way out' signs.

All measurements in millimetres.

8.0 Exit from station

8.1	Exit from station
8.1.1	Multi-exit stations
8.2	Exit guide layout principles
8.3	Signing to bus stops

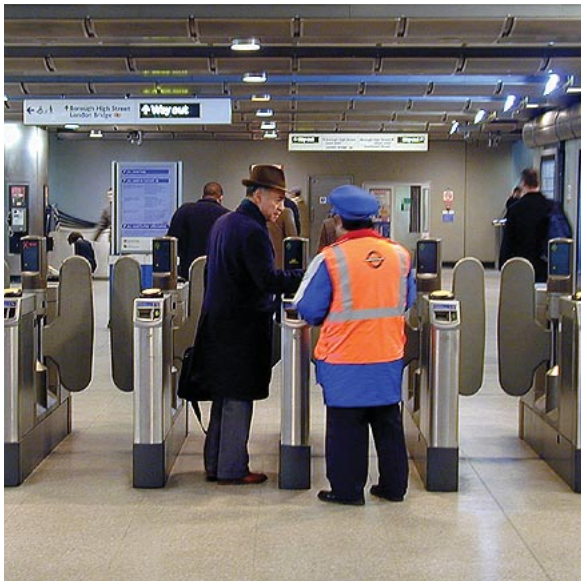
The following sheets should be used as a guide for the correct placement of exit, interchange and landmark information on exit signs within Underground ticket halls. Due to the varied complexity of stations and the nature of attractions around the system, there can be no absolute rules. The fundamental principle of clear, ordered information which is consistent with that shown on LUL vicinity maps and guides, is extremely important for customers to continue their journey effortlessly from the Underground station to their intended destination.

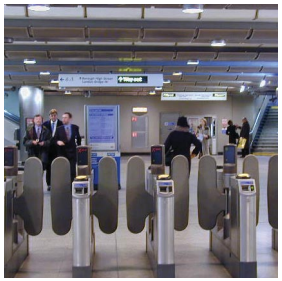
8.1 Exit from station

For all stations, the signing provided at the point of exit to street should display the 'Way out' patch (thus completing the trail from platform to street), together with primary street names, landmarks and amenities. The signing should follow the same graphic principles previously described, displaying information in a concise and consistent manner.

Where interchange facilities exist, signing should direct to the services in accordance with the Transport for London 'Interchange Signing Guidelines'.

The following pages cover some additional principles which should be adopted when dealing with more complex multi-exit stations, and also how to direct to several bus stops in different directions from the exit.

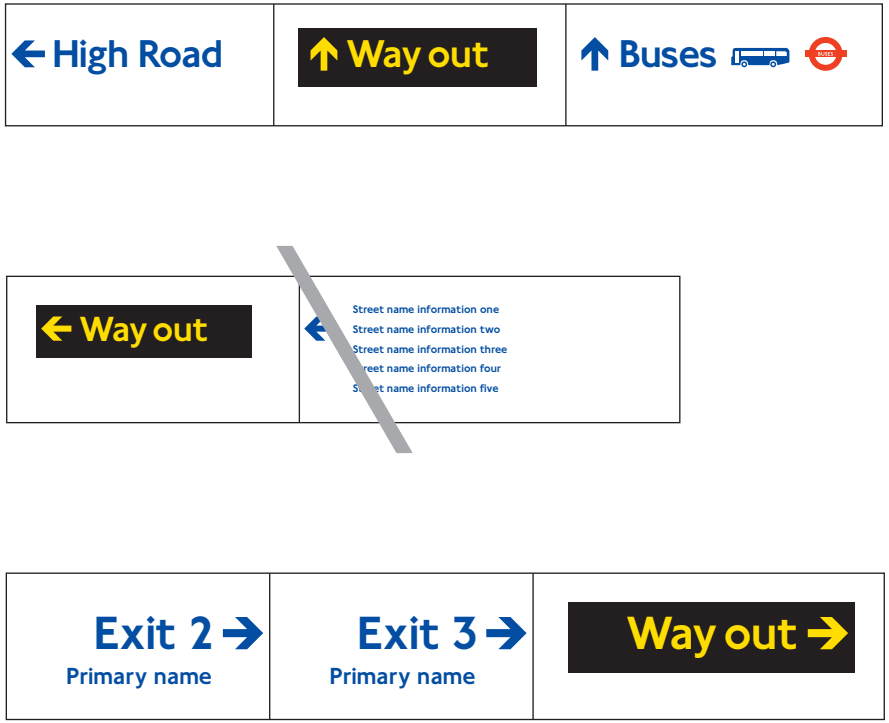




8.1.1 Multi-exit stations

It is crucial that customers are confident, when leaving the station to continue their journey, that they know which exit to use, and which way to continue from the exit. If we used just the primary overhead signing to display all information required, sign layouts would become cluttered and overcomplicated with the volume of information to be displayed, which would reduce type sizes and viewing distances considerably.

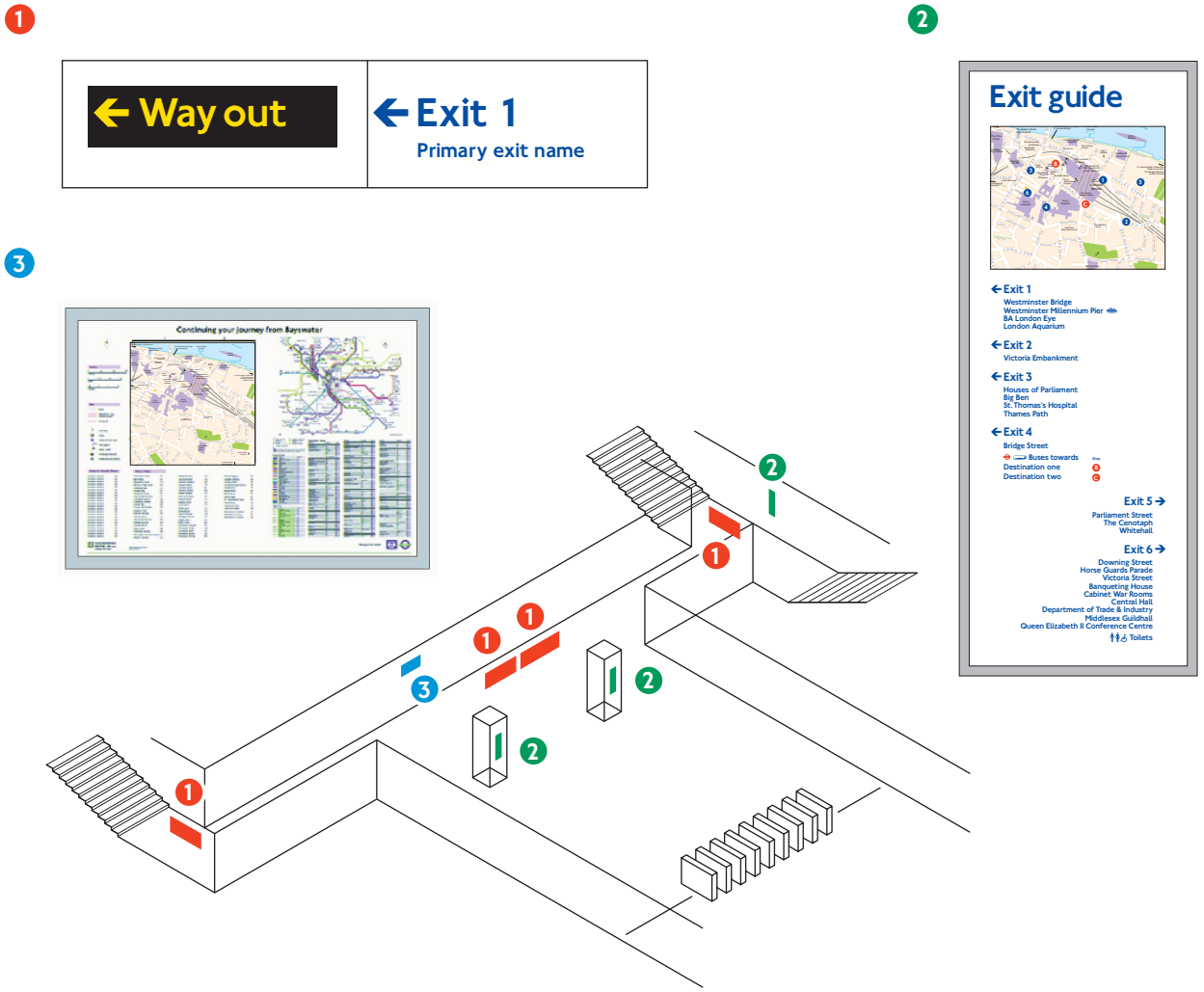
To resolve this, we have developed a structure hierarchy of exit information, which uses the primary overhead signing for exit numbers and primary names, backed by associated lists and maps carrying comprehensive information relating to the surrounding area.



8.1.1 Multi-exit stations

This illustration demonstrates a typical arrangement for exit information at a multi-exit station.

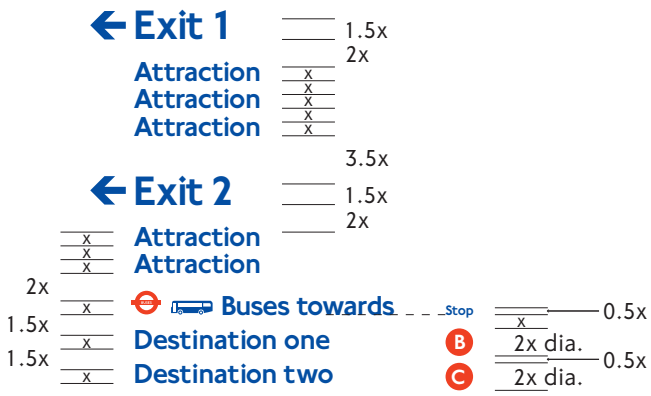
1. Overhead 'Way out' signing displaying exit number and primary name
2. Wall-mounted exit guide, showing selective list of landmarks, amenities and bus services
3. Standard printed vicinity map showing comprehensive list of all local amenities and Bus spider map

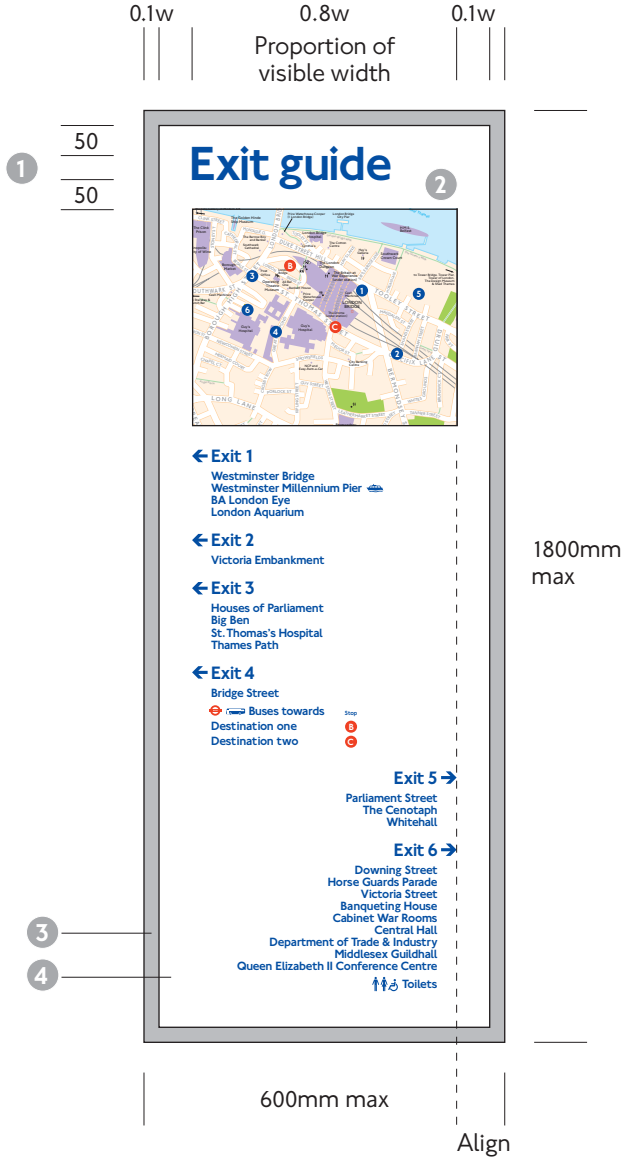


8.2 Exit guide layout principles

1. Type size D (E for narrow panels)
2. TfL style map (same as vicinity map) to show all exit points and areas served. Exit numbers shown white on dark blue discs. Bus-stop letters shown white on red discs
3. Flat aluminium frame powder-coated grey
4. Encapsulated exit guide

x = Optimum text size – 10mm x height. Where this cannot be achieved due to panel restrictions of level of information required, sizes may proportionally reduce, ensuring alignment and line spacing is maintained.





8.3 Signing to bus stops

To ensure visual consistency and a logical information trail when signing to and from bus stops, the following elements should be incorporated within signing at Underground exits.

Where bus stops are considered to provide a viable interchange service from Underground and rail stations, the bus information should be incorporated within the signing at exit points from the station as shown opposite.

It is essential that for each bus stop shown, the 'towards' destinations indicating direction of travel, are identical to those shown on the relevant bus-stop direction panel and distance given. Stop letters must always be shown as white capitals within a red disc.

To make it absolutely clear which destination may be reached on foot, and which by bus, the destinations within walking distance should be positioned at the top of the sign panel. In many instances, the sign information will be combined with an illuminated 'Way out' sign.

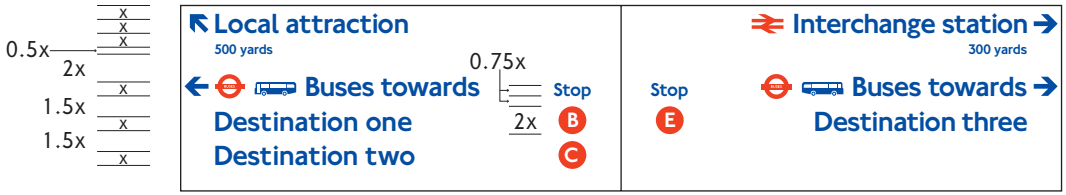
Where the walking distance is more than 400 yards, this should be clearly indicated in smaller type directly below, and added to all other destinations for consistency. In the interest of clarity, distances to bus stops should not be indicated.

Bus-stop letter

Stop name

Direction of travel destination

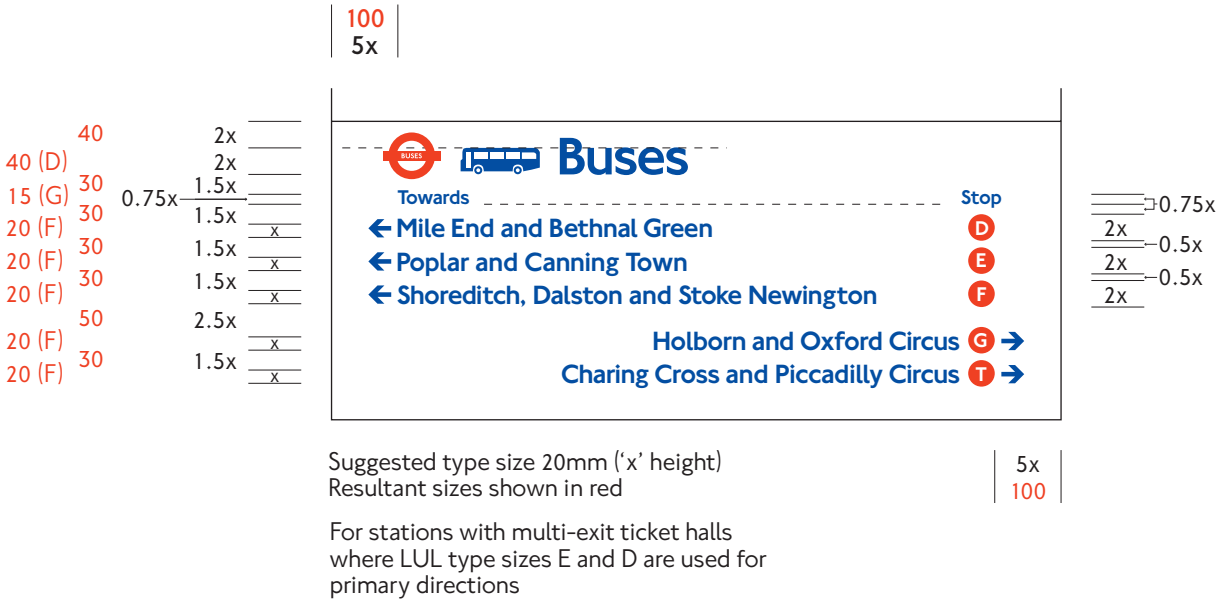
Route served



8.3 Signing to bus stops

When incorporating directions to bus stops in a directional sign, the type sizes of the other elements on the sign must not be compromised by the inclusion of bus directions, which may be several lines. Where this may occur, a single heading 'Buses' (with symbol) should be used in the same type size as other elements on the sign, with the 'towards' destinations and stops listed directly below in a type size equivalent to 50% of the primary size. This will ensure the term 'Buses' is visible from a far greater distance, and those who require it will approach the sign to read more detailed bus information.

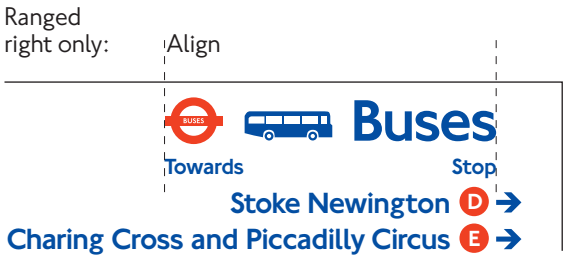
Note: Where all bus services are in one direction, only the term 'Buses' (with symbol and arrow) should be displayed, without reference to individual stops.



Suggested type size 20mm ('x' height)
Resultant sizes shown in red

5x
100

For stations with multi-exit ticket halls where LUL type sizes E and D are used for primary directions



Specific elements

9.0 Safety signs

10.0 Supplementary signs

11.0 Construction

12.0 Fixing guidelines

9.0 Safety signs

9.1	Safety signs overview
9.2	Fire safety signs
9.3	Prohibition signs
9.4	Warning signs
9.5	Safe condition signs
9.6	Mandatory signs

London Underground is legally obliged to comply with current European legislation covering the standardisation of safety signs.

The following pages provide a visual reference to clarify our responsibilities and ensure compliance.

From 1 April 1996 safety signs have been covered by EC Safety Signs Directive 92/58 EEC, to encourage the standardisation of safety signs by the use of common colours and symbols.

This is a legal requirement, and not just London Underground policy.

The actual regulations issued – Health & Safety (Safety Signs and Signals) Regulations 1996, are poorly written and have caused considerable confusion.

The symbols featured are not an adequate range, and are graphically inconsistent. It does, however, make it clear in the small print, that symbols shown may be adjusted within reason, and that additional symbols may be used, providing they comply with the principles outlined.

Layout rules for all safety signs are detailed in section 10.0.

9.1 Safety signs overview

LUL has a preferred range of standard safety symbols, together with additional symbols specific to the Underground environment, eg escalator safety symbols. These symbols are detailed in the following pages for each sign type.

As well as complying with the safety legislation, safety signing in public areas of Underground stations must also comply with LUL corporate standards, as detailed in this document.

Signing in non-public areas

The hazards and regulations associated with non-public areas (including depots) are vastly different and therefore, a different approach should be adopted.

For economic reasons, it is unreasonable to expect all safety signing to be specially produced to LUL corporate standards. The preferred range of symbols does not cover the full range required for PPE and machinery.

It is therefore recommended that off-the-shelf safety signing should be utilised for these areas, for which there are several quality suppliers.

Where areas may be subject to visitors from outside parties (eg Training Centres), every effort should be made to provide corporate safety signing.

STATUTORY INSTRUMENTS
1996 No. 341
HEALTH AND SAFETY
The Health and Safety (Safety Signs and Signals) Regulations 1996
HSE
SAFETY SIGNS AND SIGNALS
THE HEALTH AND SAFETY (SAFETY SIGNS AND SIGNALS) REGULATIONS 1996
GUIDANCE ON REGULATIONS

9.2 Fire safety signs

Sign purpose

To indicate the location of fire fighting equipment.

Intrinsic features

Symbol: white symbol on square/rectangular red background.

Text (optional): white letters on red background.

Typical messages

Fire point, Fire main stop valve, Sprinkler control valve.

Approved LUL symbols

The fire safety symbols featured in the Health & Safety regulations vary slightly from those indicated, as they are derivative of the 1984 ISO standards.

Within public areas the BS 5499 fire safety symbols should always be used, as they are fully compliant and allow the use of text to highlight specific equipment.

1. Fire extinguisher (approved LUL symbol for fire equipment cabinet)
2. Fire hose reel
3. General fire symbol for use with specific text
4. Fire alarm (also used on 'Help point' units)

1

2

3

4

9.2 Fire safety signs

Important note

This document details only the graphic principles relating to fire safety signing. It must not be used to specify the actual requirements associated with the different types of fire fighting equipment. Advice on these issues should be sought from the LUL Fire Systems Engineer.

1. Typical door sign
2. Sign showing only text is non-compliant and must be replaced
3. Suspended illuminated sign with modified glass panel incorporating symbols
4. Sign showing only text is non-compliant and must be replaced
5. Revised format illuminated fire equipment sign, for use at new installations.

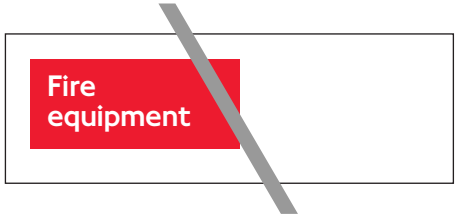
Layout rules for all safety signs are detailed in section 10.0.

1

2

3

4



5

9.3 Prohibition signs

Sign purpose

To indicate that certain actions are prohibited ie MUST NOT DO.

Intrinsic features

Symbol: red circular band with diagonal bar through black symbol.

Text (optional): white letters on red background.

Typical messages

No smoking, No entry and Do not pass this point.

Approved LUL symbols

The symbols shown are those used in public areas. Within staff areas and depots the full range of BS symbols should be used as required.

1. No smoking
2. No entry, Do not pass
3. General prohibition (eg No busking)
4. LUL dot-matrix 'Do not enter' symbol, refer to section 10.14.

1

2

3

4

1 of 2

9.3 Prohibition signs

1. Typical wall-mounted sign
2. While the symbol is correct, the blue text background is non-compliant
3. Typical door sign
4. Signs showing only text are non-compliant and must be replaced

Layout rules for all safety signs are detailed in section 10.0.

1

2

3

4

9.4 Warning signs

Sign purpose

To indicate the presence of hazards.

Intrinsic features

Symbol: yellow triangle with black border and symbol.

Text (optional): black letters on yellow background.

Typical messages

Danger – High voltage

Caution – Mind your head

Caution – Door opens onto passenger concourse

Approved LUL symbols

The symbols shown are those used in public areas. Within staff areas and depots the full range of BS symbols should be used as required.

Layout rules for all safety signs are detailed in section 10.0.

1

2

3

4

9.5 Safe condition signs

Sign purpose

To indicate the location of emergency facilities (non-fire fighting).

Intrinsic features

Symbol: white symbol on green square.

Text (optional): white letters on green background.

Typical messages

First aid, Stretcher, Staff assembly point (SAP).

Approved LUL symbols

The symbol shown is used in public areas. Within staff areas and depots the full range of BS symbols should be used as required (eg eyewash, drinking water).

1. First aid equipment
2. Emergency phone
3. Signs showing only text are non-compliant and must be replaced

Layout rules for all safety signs are detailed in section 10.0.

1

2

3

9.6 Mandatory signs

Sign purpose

To indicate that a specific course of action must be taken, ie MUST DO.

Intrinsic features

Symbol: white symbol on Underground light blue circle.

Text (optional): white letters on light blue background.

Typical messages

Fire door keep shut, Keep clear, Report to.

Standard symbols

The symbols shown are those used in public areas. Within staff areas and depots the full range of BS symbols should be used as required (eg wear protective clothing, turn off lights).

Additional LUL symbols

The symbols shown are those used on escalator signs to accompany the mandatory instructions. These are fully compliant with the safety regulations.

1. General mandatory symbol accompanying text message
2. General mandatory symbol to contain text message
3. Hold handrail, keep clear of edges
4. Dogs must be carried
5. Keep a firm hold of children

1

2

3

4

5

9.6 Mandatory signs

1. Typical mandatory message
2. Standard blue-spot door notices are fully compliant with the statutory regulations. However, in public areas they should be used instead of standard LUL door signs only on panel doors, where space is constrained
3. While this sign is laid out to corporate standards, impact is lost in not complying with safety standards

Layout rules for all safety signs are detailed in section 10.0.

1

2

3

10.0 Supplementary signs

10.1 Supplementary signs
10.2 Sign wording
10.3 Panel sizes
10.4 Typeface
10.5 Type size and emphasis
10.6 Line spacing
10.7 Borders
10.8 Margins
10.9 Margins on signs with pictograms
10.10 Combining signs
10.11 Door signs
10.12 Rendezvous points and assembly points
10.13 Fixing of sign panels
10.14 Emergency – Do not enter
10.15 Fire equipment signs
10.16 'Help point' signs
10.17 CCTV signs
10.18 Lift signs
10.19 Car park signs

Supplementary signs can be distinguished from directional signing in that they do not convey route information.

Supplementary signs regulate the actions of both customers and staff to ensure that stations function as safely and as efficiently as possible.

10.1 Supplementary signs

Station interiors are busy environments with many visual distractions. Consistent signing is therefore vital to ensure instant recognition.

Flexibility is essential. The signing system must accommodate a wide variety of messages and must communicate them quickly and clearly under difficult conditions.

10.2 Sign wording

All messages should be clear and concise. Punctuation should be used only when absolutely necessary, and only essential information should be included, to ensure speed of comprehension and economical use of space.

Consistency in the vocabulary and structure of the message is essential in aiding quick recognition and reinforcing the impression of an effective, thorough system.

Sign messages can be divided into six basic categories, to match the notice types as detailed in this section. Messages should be written to convey the notice category.

1. **Mandatory messages** should convey regulatory safety directives from London Underground to passengers and staff. They should be positive in nature.
2. **Prohibition messages** are negative in nature and may use directives such as 'Do not ... ', 'No admittance' and 'No smoking'.
3. **Safe condition messages** should convey concise instructional information, positive in nature. They may use the term 'Emergency'. Safe condition messages can also be used to mark the position of safety equipment.

Emergency button
Press to stop train
Emergency button
A further safety feature has been incorporated on the Victoria line
Above this notice is a small yellow panel containing a button
In case of emergency press it and the train will instantly stop

10.2 Sign wording

4. **Warning messages** are negative in nature but should not use negative directives such as 'Do not ... '. They may refer to 'Danger'.
5. **Fire safety messages** should indicate the presence of fire equipment.
6. **Passenger information messages** should offer only passenger convenience and non-safety regulatory information, or be used to label relevant station areas, but not safety equipment.

Two type sizes may be used when there are two distinct levels of information. This is especially the case with safety signs, where information such as Danger or First aid needs to be particularly visible. Secondary information should be in a smaller size so as not to distract from it. If there appears to be the need for a third type size, this is usually an indication that unnecessary details are being included, unless the message is particularly long as in, for example, some car park signs. See section 10.19.

New Johnston Bold should be used sparingly for emphasis within text, and should not be used for the main message or to create a heading.

Foreign language translations should not be used on notices.

Dogs must be carried

Mandatory

No smoking

Prohibition

Fire extinguisher

Fire safety

Litter

Passenger information

Danger
High voltage

Warning

First aid

Safe condition

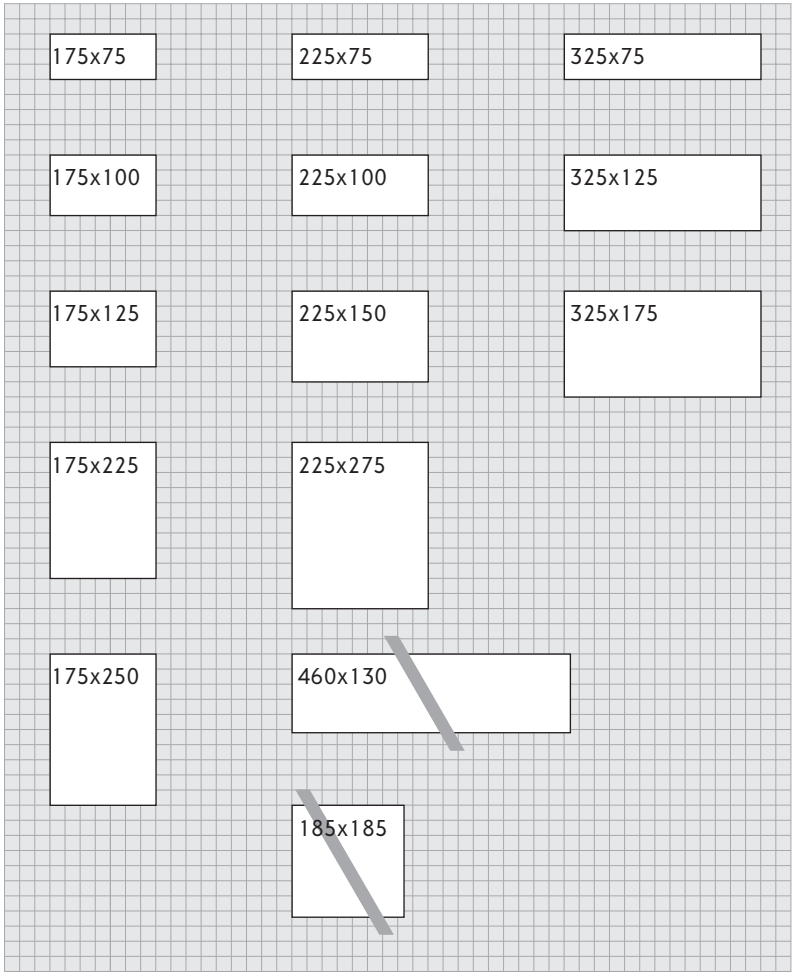
10.3 Panel sizes

The panels of the supplementary signs system are based on a 25 x 25mm grid. Exceptions are door signs (see section 10.11) and those cases when features such as frames dictate the size of the panel. The choice of format, either vertical or horizontal, and the choice of panel size depend on the following.

- Lettering size for optimum legibility
- Length of message(s) to be contained
- Architectural considerations, for example space available, surface decoration and so on
- Juxtaposition with other signs

Some scaled-down examples of preferred panel sizes superimposed over the grid are shown on this page.

When combining signs, the individual signs do not need to conform to the 25 x 25mm grid as long as the entire panel does so.



All measurements are in millimetres

10.4 Typeface

The typeface used for all supplementary signing is New Johnston Medium. New Johnston Bold may be used sparingly for emphasis within the text but must not be used for the main message or to create a heading.

Upper and lower case must always be used. Capitals must never be used alone and initial capitals may be used only at the beginning of a sentence or for proper nouns.

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
abcdefghijklmnop
qrstuvwxyz
1234567890£/.,“”():;

New Johnston Medium

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
abcdefghijklmnop
qrstuvwxyz
1234567890£/.,“”():;

New Johnston Bold

10.5 Type size and emphasis

The type size used for any supplementary sign will depend on the viewing distance. See section 1.3.2.

The minimum type size should be a cap height of 8mm. Larger sizes may be used, increasing in increments of 2mm. Door signs are an exception to this rule. See section 10.11.

Secondary information should be set to a cap height of 0.7 of the main message. No more than two sizes of type should normally be used in the same notice. If it is absolutely necessary to use a third size of type, it should be set to a cap height of 0.5 of the main message.

When this gate is closed please use the other entrance

Intervention shaft

In emergency telephone 020 7240 1088

Station car park

Cars and motorcycles with sidecars

50p per day

Pay to exit – machine accepts 10p coins only

Overnight charge £1.00

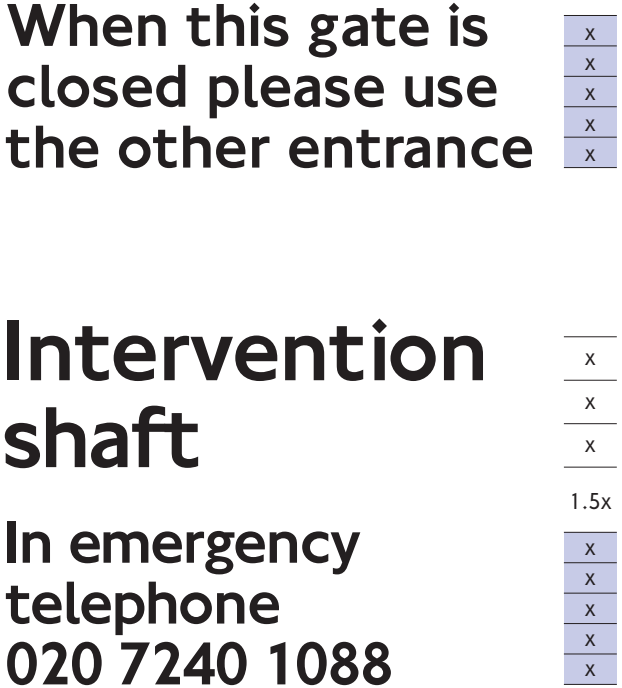
Solo motorcycles mopeds and scooters

No charge

Must not be ridden over rising kerbs at entrance

10.6 Line spacing

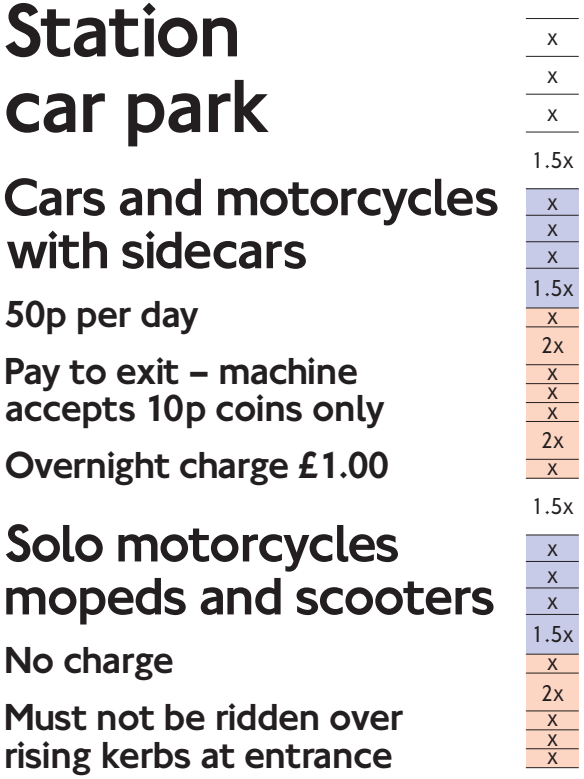
To achieve the correct line spacing, the ‘x’ height of the lower-case letter must be used as the normal space between two lines of type of equal size. When using more than one size of type, the ‘x’ height of the larger type size should be used to separate the larger size from the smaller.



1 of 2

10.6 Line spacing

An extra line space equal to the appropriate x value should be used to separate paragraphs of text. When there is more than one paragraph in a single message, a heading should be followed by a space of 1.5 times its 'x' height to balance the line spacing throughout the message.



x = x height of largest lettering

x = x height of secondary lettering

x = x height of smallest lettering

10.7 Borders

Every supplementary sign panel which does not incorporate a structural frame, should have a surrounding border.

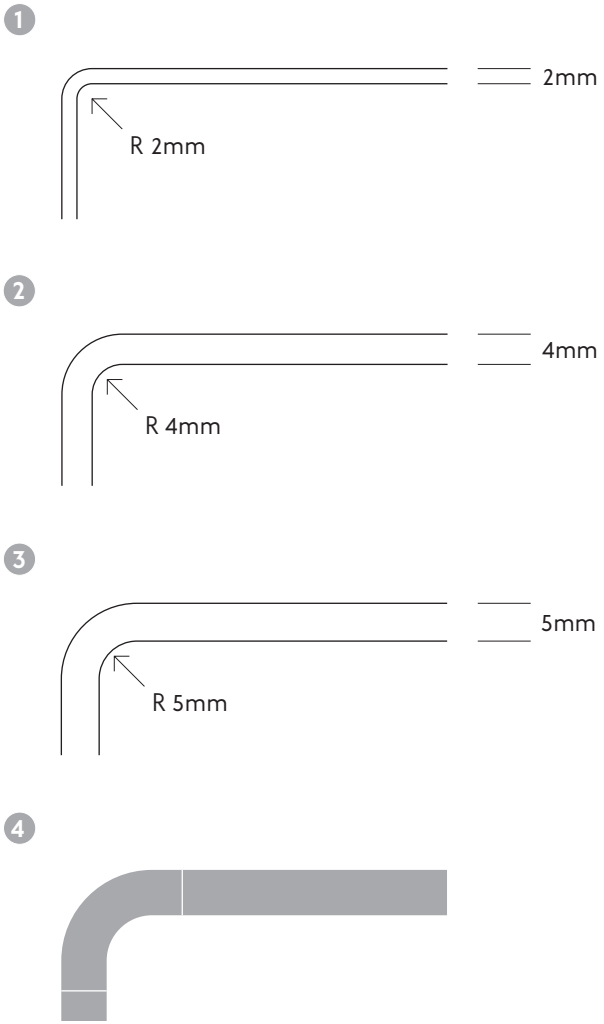
Borders on panels measuring less than 625cm² should measure 2mm in width with radius corners of 2mm.

Panels measuring between 625cm² and 1600cm² have borders measuring 4mm with 4mm radius corners.

Panels measuring more than 1600cm² have borders of 5mm with 5mm radius corners.

When a supplementary sign incorporates a structural frame no border is used. See section 11.0.

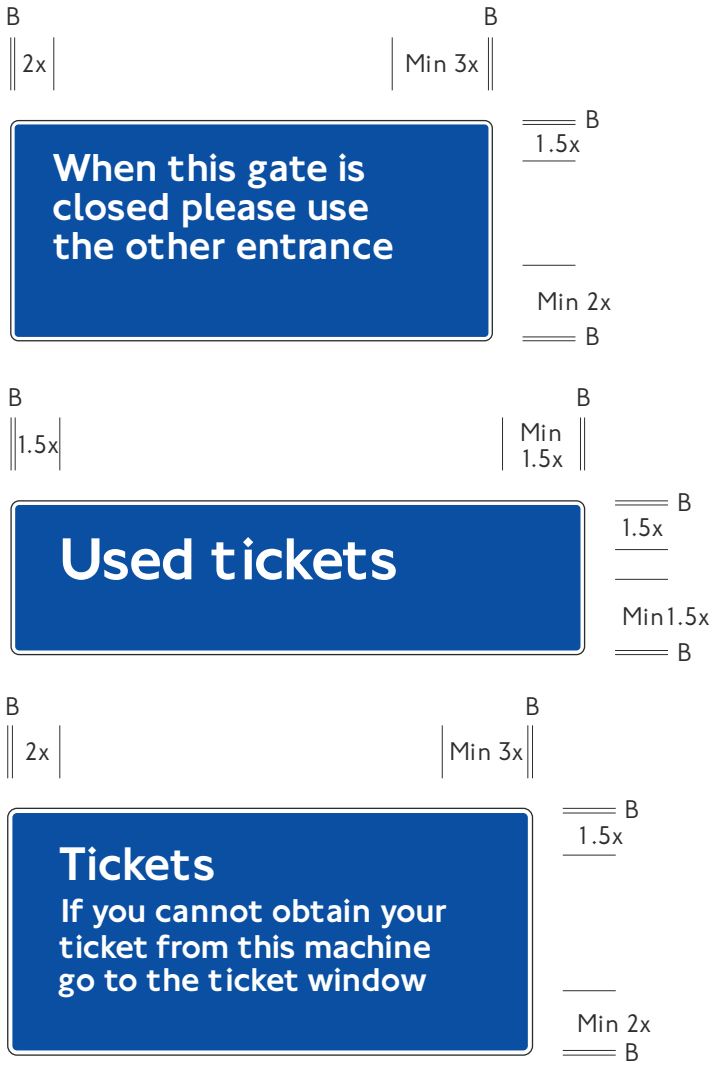
1. Panels less than 625cm²
2. Panels between 625cm² and 1600cm²
3. Panels more than 1600cm²
4. Panels with structural frame



10.8 Margins

Text is always ranged left. The left-hand margin is equal to 2 times the x height of the largest type. The top margin is equal to 1.5x and the right-hand margin a minimum of 3x. The bottom margin is a minimum of 2x measured to the baseline of the last line of type. Both of these margins may be larger than the required minimum in order to achieve greater uniformity of size of notice.

For door signs and car park notices see sections 10.11 and 10.19 respectively.



x = x height of largest lettering
B = calculated border depth

10.9 Margins on signs with pictograms

It is important to remember that for people who do not read English, a pictogram may be the only part of a sign that they can understand. It is therefore essential, especially with safety signs, that the pictogram is treated as equally important as the text, and not simply as a means of emphasising it.

Pictograms come in a variety of shapes, so for the purpose of establishing a standard, margins are measured from an imaginary square field indicated by the dotted lines in the diagrams of this page. Many pictograms will fill the field so that they are touching all four sides. Those that are narrower should be centred vertically. Those that are shorter than the height of the field should be aligned with the top edge.

Although the size of the square field will vary with the panel size and the length of the message, the proportion of the field in relation to the margins around it will remain constant.

The size of pictogram used is dependent upon the type size and length of the accompanying sign message. When deciding sign size, the viewing distance chart in section 1.3.2 should be consulted to determine size of type. The pictogram should then be visually matched in size, taking into account the type size and length of the accompanying message.

10.9 Margins on signs with pictograms

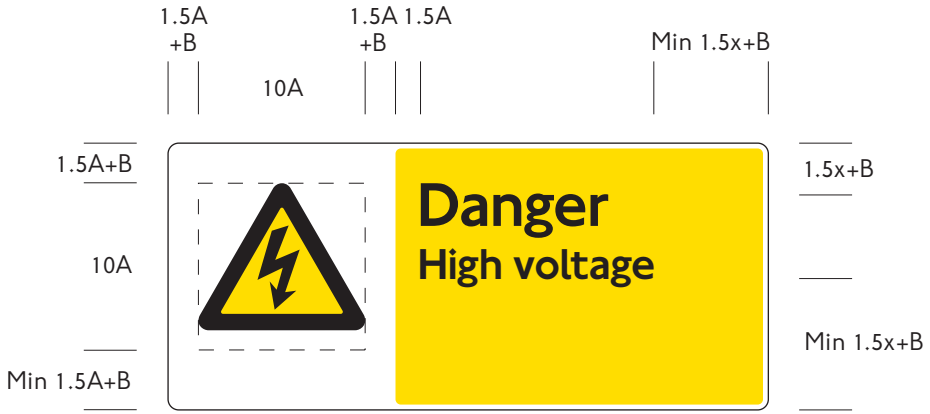
Horizontal format

Pictograms are placed on the left of the notice. They are positioned in this area incorporating the illustrated margins. The text is positioned within a colour block to the right of the pictogram as shown.

On notices with only one line of type, the pictogram should be visually centred on the depth of the type. Margins within the notice are based on a combination of measurements taken from the type size, expressed in terms of the 'x' height and the largest dimension of the pictogram, expressed in terms of A.

Where margins are expressed in terms of both x and A, the largest calculated measurement should be taken.

Door signs follow slightly different rules concerning layout, see section 10.11.

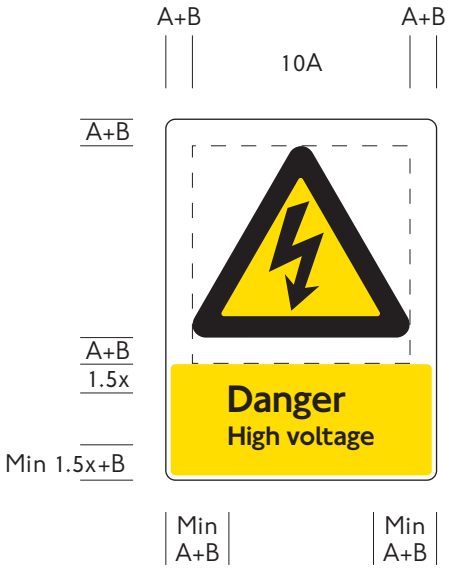


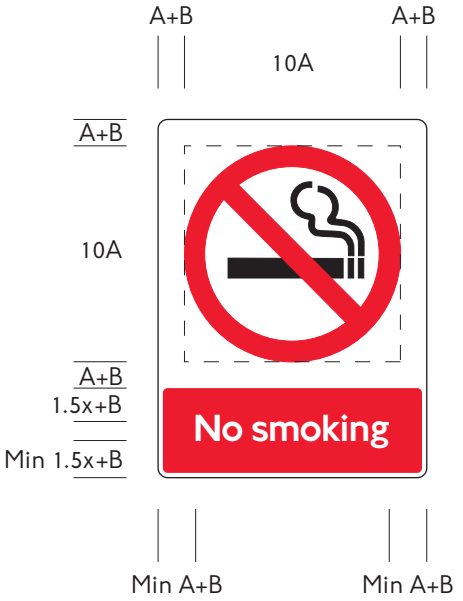
10.9 Margins on signs with pictograms

Vertical format

On vertical panels the pictogram is always placed above the message. The text is positioned within a colour block incorporating the illustrated margins. There should be a margin of A between the bottom of the pictogram and the top of the colour block.

When there is more than one line of text, it should be set ranged left and then the text block should be centred.



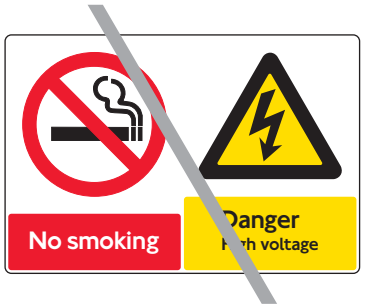


10.10 Combining signs

Rules for combined signs are generally the same as those for individual signs, but some adjustments must be made to ensure that the signs are as consistent and as clear as possible.

Different signs may be combined on one panel to create horizontal and vertical formats. Notices with pictograms arranged vertically may be placed side by side to create a combined sign. Individual horizontal notices may be arranged one above the other to create a combined sign.

Where a combined sign incorporates pictograms, they must always appear to be the same size. Colour text blocks accompanying pictograms should be aligned on combined signs as indicated.



10.10 Combining signs

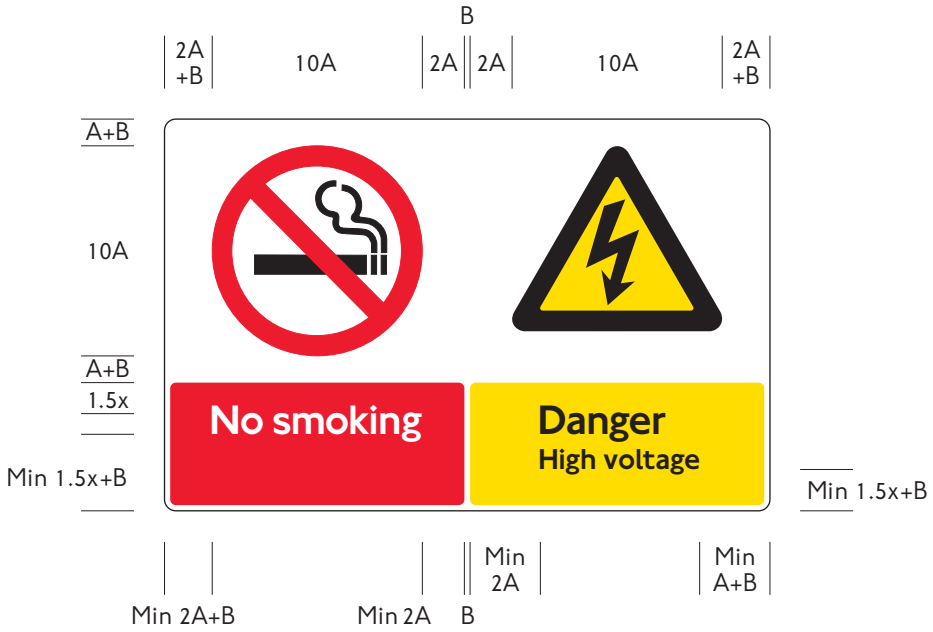
Horizontal format

In order to combine individual signs with pictograms to create a horizontal format, the margin around the square field must be adjusted. The top margin remains one times the width of the pictogram (10A), but the side margins are enlarged to 2A so that the pictogram is proportionally smaller.

Individual elements in a combined sign must be the same size. No more than two type sizes may be used.

Text should be centred below the pictograms within colour blocks in the same way as it is on individual signs, using the same minimum margins. Messages with pictograms should share the same beginning baseline, and this baseline should be defined by the largest type size used.

When including a notice without a pictogram, the top of the first line of text should be aligned with the top of the pictogram. The left margin is A and the right and bottom margins are a minimum of A.



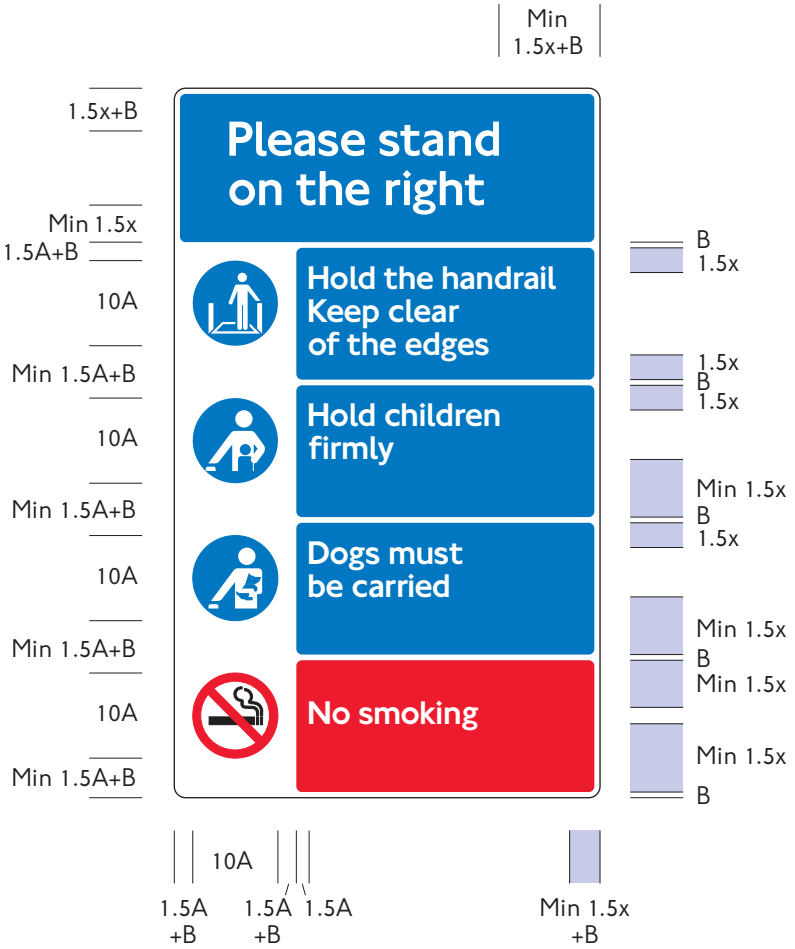
10.10 Combining signs

Vertical format

When combining signs with pictograms, the same rules used in creating individual notices apply. Pictograms must be the same size and equally spaced within the sign panel, individual sign messages should be on the same size colour block whenever possible.

When including notices without pictograms, the text should be aligned with the left side of the square field. The top, bottom and right-hand margins are the same as those signs with pictograms.

On combined sign panels which do not include pictograms, the rules for top and bottom margins on individual notices still apply. The left and right-hand margins should be defined by the largest type size and should be shared by all the signs in the combined notice.



10.11 Door signs

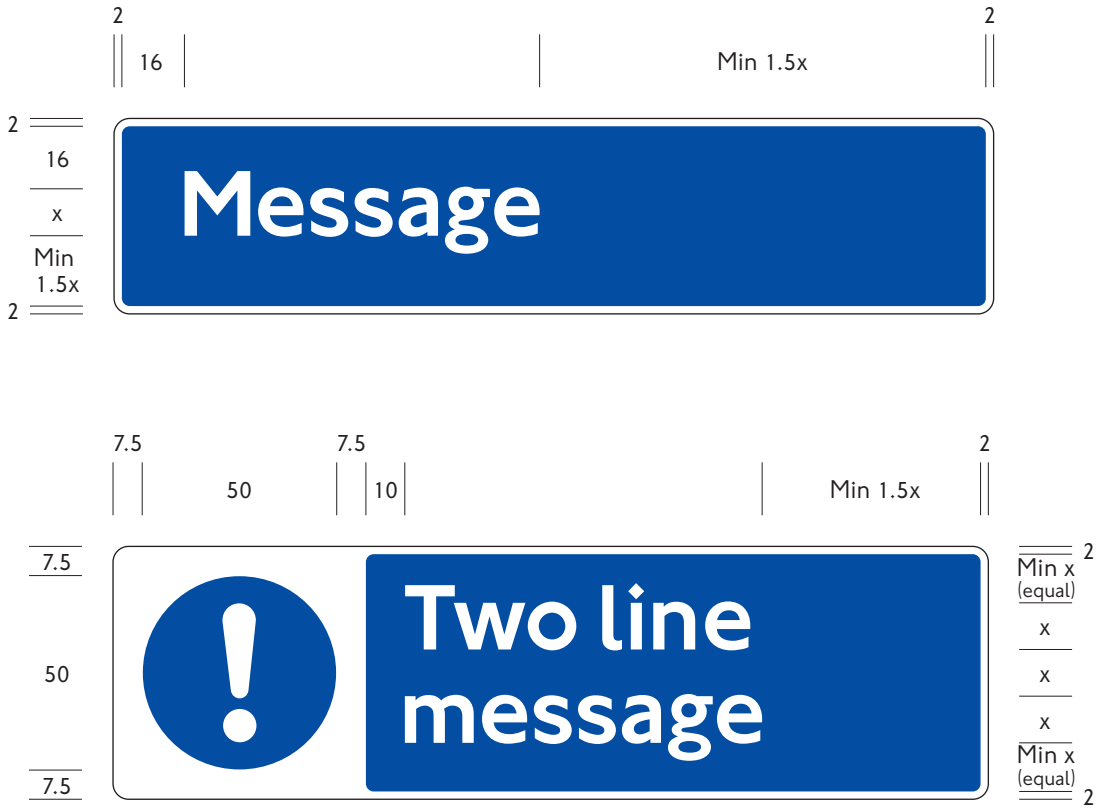
For absolute consistency, door signs follow a slightly different set of rules than other supplementary signs.

Door signs may indicate the following information:

- Function of room or doorway displayed as coded information in public areas
- Occupant's title
- People authorised to enter
- Number and level
- Specific mandatory and safety information

Door signs conform to a standard length 225mm sign panel, with a depth of 50mm increasing in increments of 15mm to a maximum depth of 125mm.

Type sizes		Secondary sizes		
	CH	x	CH	x
E	41	30	28	20
F	28	20	21	15
G	21	15	16	12
	16	12	12	9
	12	9	10	7
	10	7	8	5.5



225 x 65mm sign with message centred on depth of pictogram

10.11 Door signs

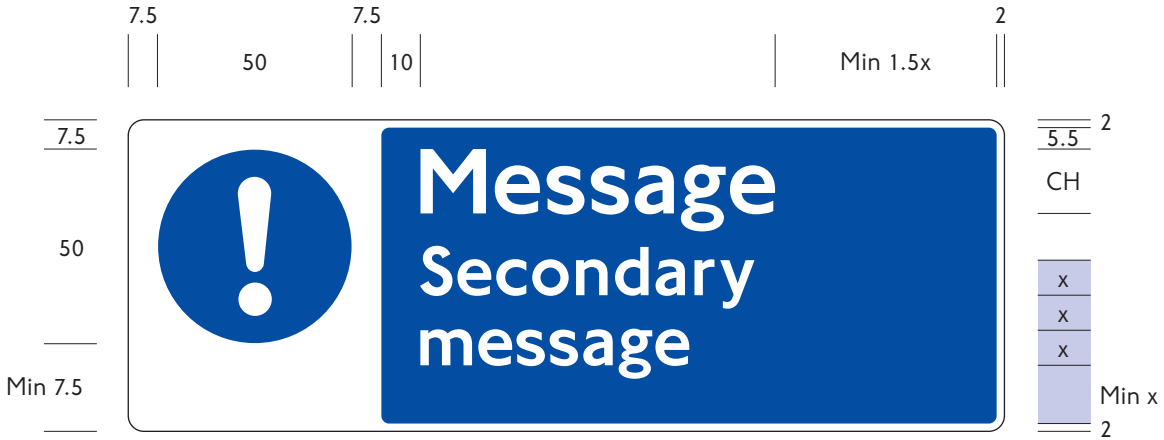
The standard set of type sizes listed in the table on the previous page may be used for door sign messages. Where large sizes are required, standard direction sign type sizes may be used, as detailed in section 1.3.2. Type sizes below 10mm cap height should be avoided.

All non-safety-related signing should use a standard 16mm cap height message. Accompanying secondary messages should be in 12mm cap height type. The sign message has fixed top and left side margins as illustrated, this ensures alignment when signs are combined.

All door signs have a 2mm Underground white border.

Safety-related signs may use larger type sizes and incorporate a standard 50mm pictogram. Only approved Underground pictograms may be used on safety signs, see section 9.0.

Pictograms should be positioned on signs as illustrated, with fixed top, left and right margins. The message on standard 225 x 65mm sign panels should be centred on the depth of the pictogram field. Messages on sign panels greater than 65mm depth should be aligned with the top of the pictogram, as illustrated.



Sign larger than 225 x 65mm with message aligned with top of pictogram

CH = cap height

x = x height of largest type size

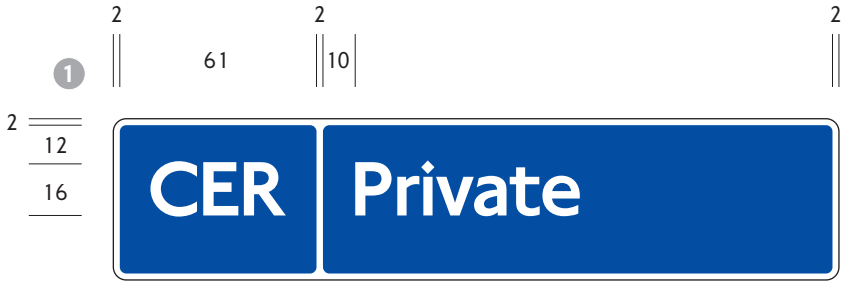
x = x height of secondary type size

10.11 Door signs

1 All door signs within public areas should display the standard door code in Underground white type, horizontally centred within a 61mm Underground dark blue box. These signs should carry the message 'Private' in 16mm cap height type, as shown.

Door signs within non-public areas should show the room function with box and code omitted.

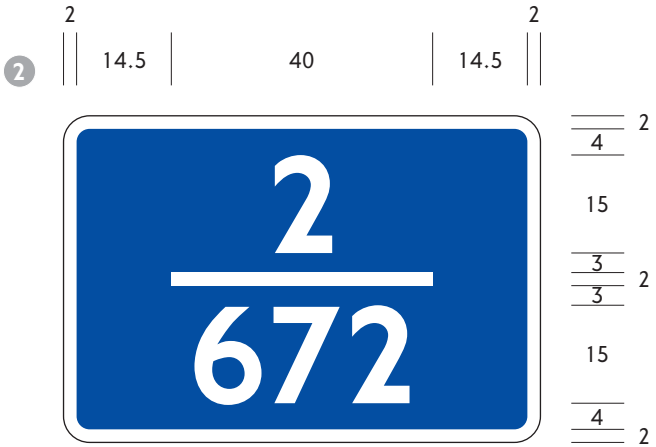
Door signs are Underground dark blue, with the type and border in Underground white. Mandatory and safety-related door signs follow the same rules for colour as other supplementary signs. Reference for these colours can be found in section 1.2.



Standard door sign within public areas

Station area ID codes

2 Door and level numbers are on a separate sign panel of the size and layout illustrated. These signs should be positioned 50mm from the top left-hand corner of all doors, as shown.



Standard door and level number sign

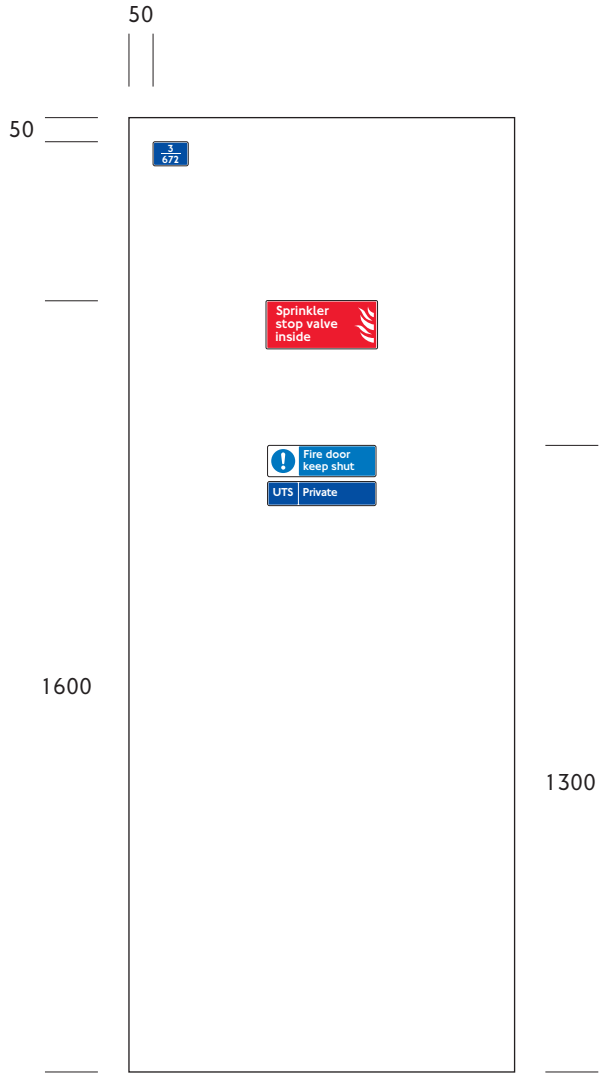
10.11 Door signs

When door signs are combined they should be stacked in vertical alignment, and horizontally centred within the door width.

Fire safety signs should be positioned at a fixed height of 1.6m. All other signs should be positioned 1.3m above floor level, as illustrated. When signs are combined, a gap of 10mm should be left between signs, as shown.

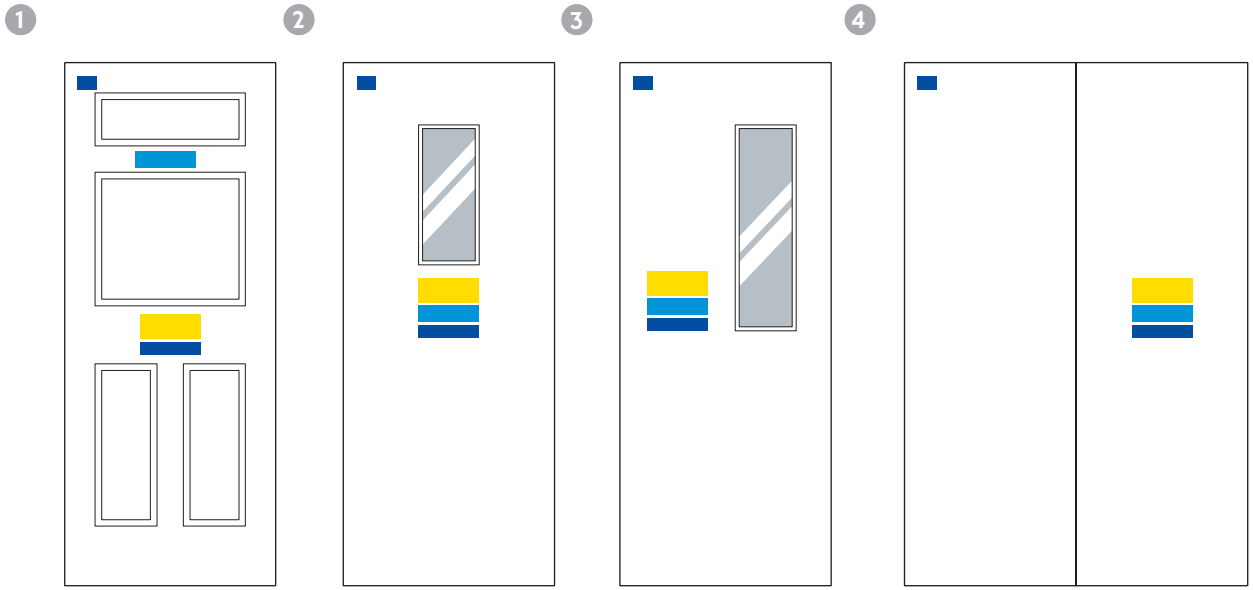
Door signs should be positioned in the following order, top to bottom:

- Fire safety
- Prohibition warning
- Safe condition
- Mandatory information



10.11 Door signs

1. On panel doors, ensure signs are not fitted within actual panels unless absolutely necessary
2. Where vision panels are fitted, a clear space of 50mm should be left around the glazing frame
3. Where vision panels dictate the signs should be to one side, try to align elements vertically centred within remaining space
4. For double doors, signs should be fitted to right-hand door only, unless specified.



10.12 Rendezvous points and assembly points

Rendezvous points are designated areas, within which the emergency services will assemble in an emergency situation. A sign should be displayed carrying the message ‘RVP’.

Staff assembly points are designated areas within which Underground staff will assemble in an emergency situation, and a sign should be displayed carrying the message ‘SAP’. Neither sign forms part of the passenger information system and should not be combined with other signs, utilise directional arrows or be illuminated.

Their positioning should be restricted to the immediate vicinity of the designated area. Rendezvous and assembly point signs follow the same layout rules as supplementary signs. They are of a fixed size as illustrated.

10.13 Fixing of sign panels

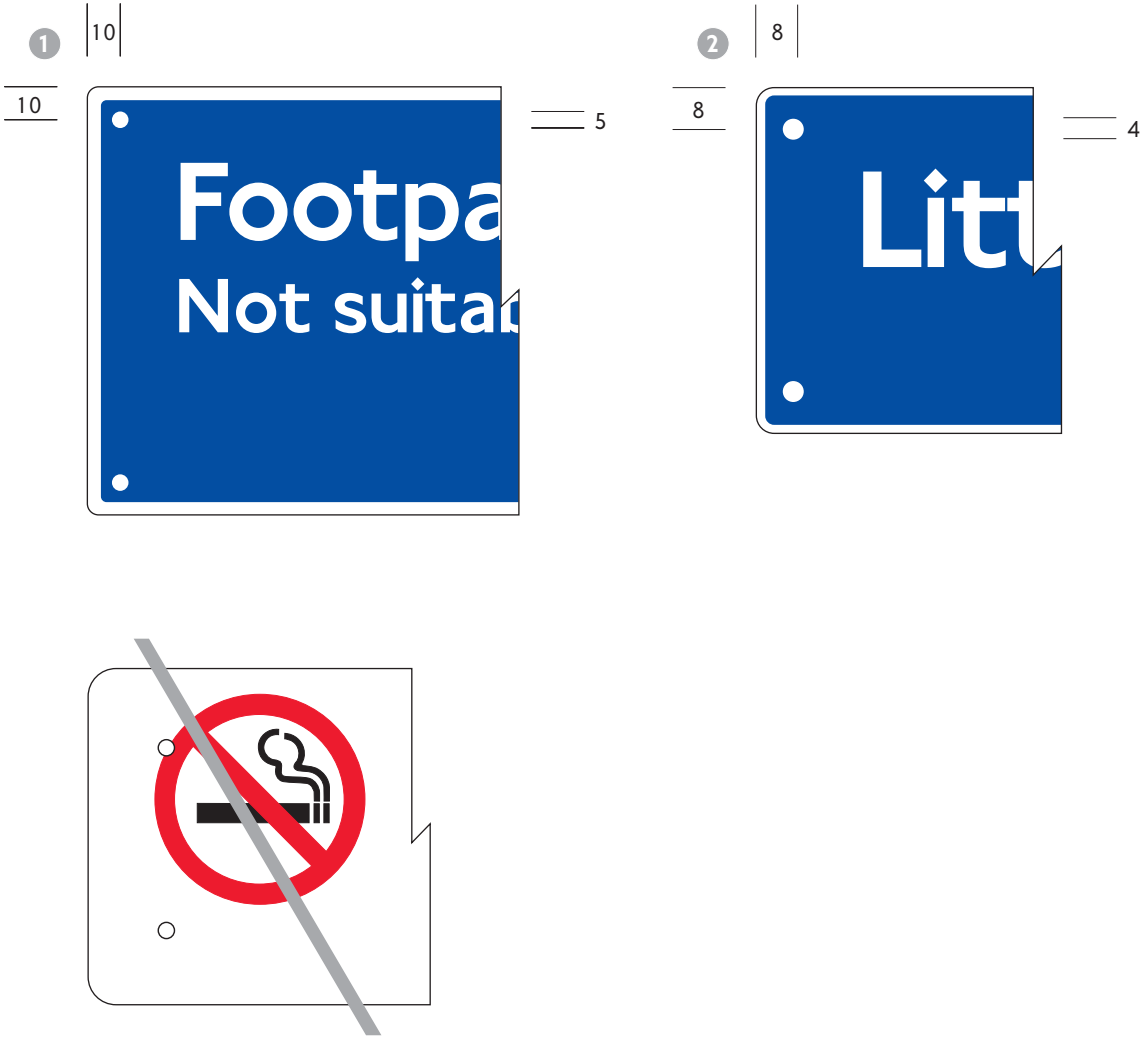
Signs should be fixed using screws only when absolutely necessary.

Holes may be drilled in sign panels when it is necessary to fix them to station walls and doors using screws. A 4mm hole may be drilled in sign panels less than 625cm² and a 5mm hole may be drilled in sign panels greater than 625cm². The holes should be positioned incorporating the illustrated margins. A hole should be drilled in each of the four corners.

The margins around pictograms and text may be increased to prevent holes obscuring imagery or lettering.

Round-head screws should be used to fix signs. Where practical, screw heads should be painted to match the sign colouring.

1. Signs greater than 625cm²
2. Signs less than 625cm².



All measurements are in millimetres

10.14 Emergency – Do not enter

The function of the ‘Emergency – Do not enter’ sign (EDNE), is to deter customers from entering a station during or after an emergency evacuation. The signs display both text and symbol using fibre-optic studs so as to be clearly visible even under smoke conditions, coupled with flashing yellow halogen and an integral siren. These signs must be operated only during an emergency, unless formal agreement exists with the LFEPA and the LUL Fire Systems Engineer.

Within the Fennel Report following the King’s Cross fire, it was recommended that such signs be fitted at all entrances to sub-surface stations where staff could not immediately attend in the event of an emergency. The use of fibre-optic legend, flashing light and sounders was tested and approved by London Underground and the LFEPA. The sign format was reviewed in the light of the 1996 Safety Signs & Signals Legislation, which called for the use of international pictogram symbols to be displayed on all safety signs. A variation on the standard ‘hand’ symbol was developed with the LFEPA for specific use on fibre-optic EDNE signs on both Underground and some rail stations. No other symbol may be used.

10.14 Emergency – Do not enter

The following illustrations show three common formats adopted, which are sized to suit the fluorescent lamp lengths. Other sizes may be considered, providing the graphic panel layouts are consistent, and the flashing halogen lamps are immediately adjacent to the text/symbol panel. Sign casing should be black, so as to be discreet under normal conditions.

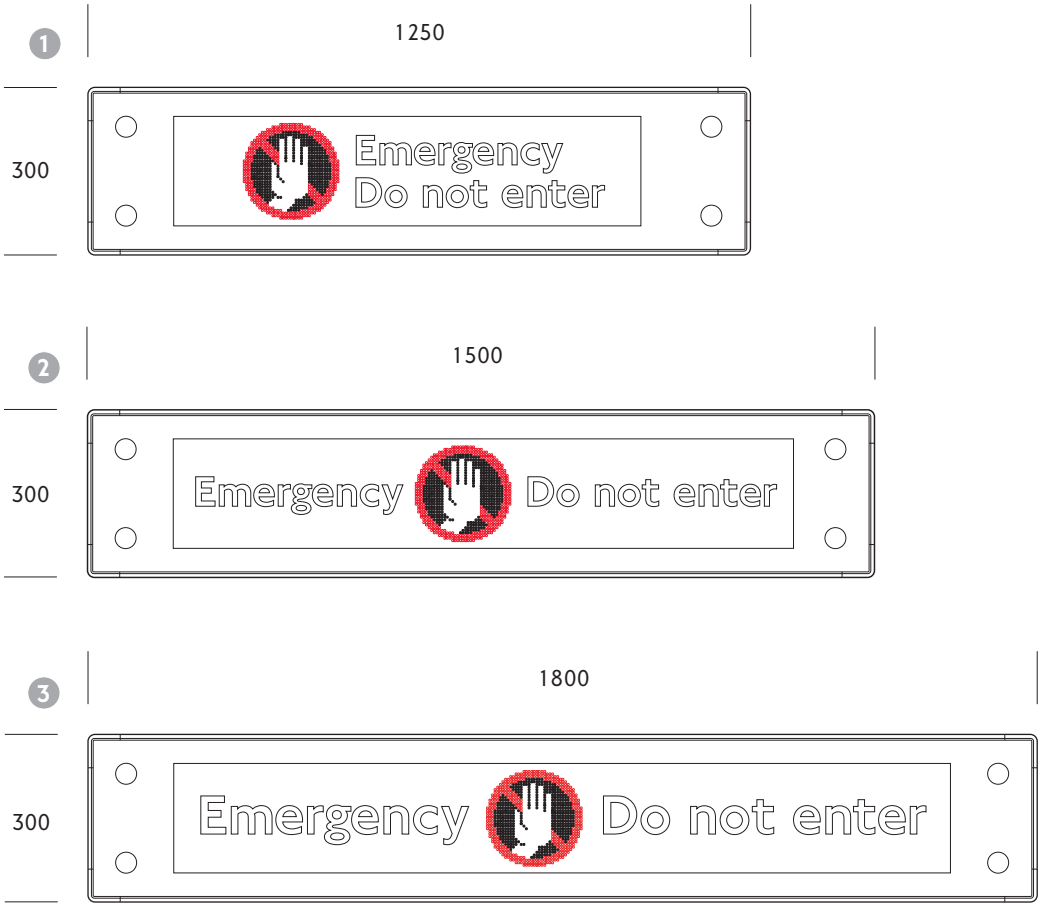
Symbol and lettering

The symbol is made up as a grid of 4mm-diameter polyester fibre-optic studs at 4mm centres. Red studs are used for the ring and bar, with white studs being used for the background. No studs are used for the hand symbol so as to appear black unlit. Layouts for this symbol are available from the TfL Signs Unit. The text is made up of 3mm-diameter red fibre-optic studs at 4mm centres, which are centred on the letter outlines.

Lamps

Four halogen lamps must be fitted behind apertures in the front face with yellow glass filters. These should flash in pairs alternately on each corner of the front panel.

1. Panel size 850 x 210mm for use with 900mm lamps
2. Panel size 1190 x 210mm for use with 1200mm lamps
3. Panel size 1490 x 210mm for use with 1500mm lamps



10.14 Emergency – Do not enter

Sounders

There shall be two levels of electronic sounder, the loudness being 110dB for 90 seconds, then automatically reverting to 90dB. The frequency must be checked and adjusted so it is not confused with the Fire Brigade personnel operating bleepers.

Control mechanism

The signs must be connected to a protected UPS supply, and be automatically operated from either:

- Stage 2 fire alarm signal
- Designated switching point – usually within operations room

For full details refer to the LUL Fire Systems Engineer's Standards.

10.15 Fire equipment signs

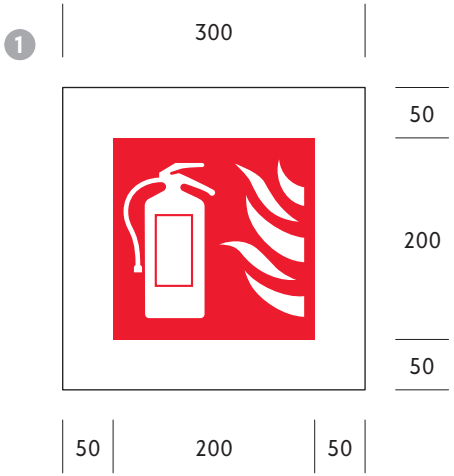
Fire equipment signs indicate the position of fire cabinets to staff and fire services within stations. Where cabinets contain fire hydrants or hosereels, they must display an overhead illuminated sign displaying the standard LUL 'extinguisher' symbol as agreed between LUL and the LFEPA. No other fire symbol should be used to represent fire equipment cabinets in Underground areas, unless formally agreed with LUL and the LFEPA.

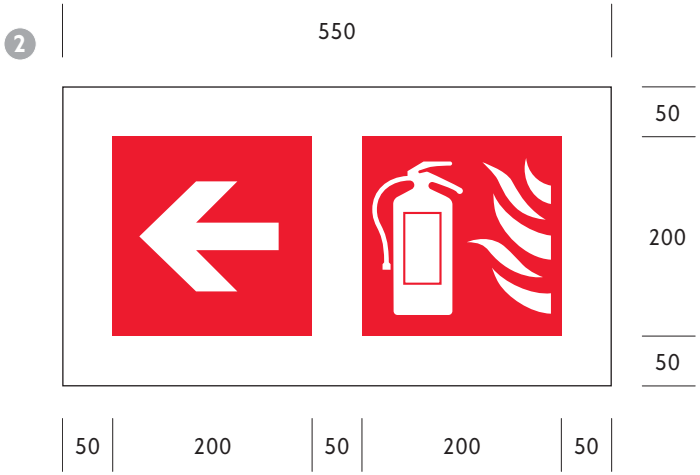
Where a fire cabinet contains extinguishers but no hosereel and hydrant, a standard, unlit, wall-mounted extinguisher sign must be fitted directly above. If, however, this is the only fire point serving an entire platform (no hydrant or hosereel present), this must also have an illuminated sign above. Illuminated fire equipment signs should not be used in conjunction with unlit, wall-mounted signs.

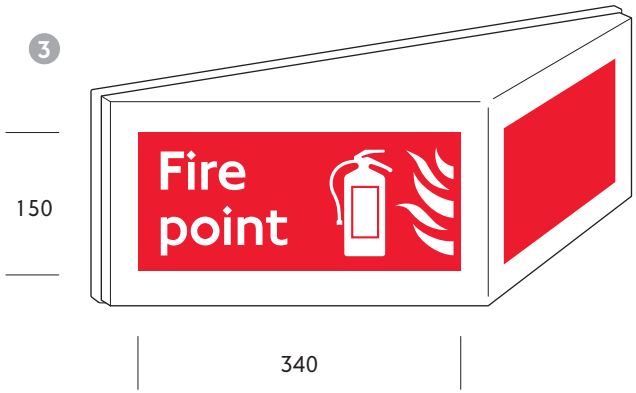
There are three standard types of illuminated sign, the type used depending on the fire equipment location and viewing angle. For platforms, the square format sign should be used, positioned directly in line with the fire equipment cabinet, orientated to face along the platform. Where the equipment cabinet is set back from the platform, or in a cross-passage close to the platform, the directional version with arrow should be fitted. In ticket halls and open areas where the sign may be viewed at a distance from several angles, the wall-mounted triangular version should be used.

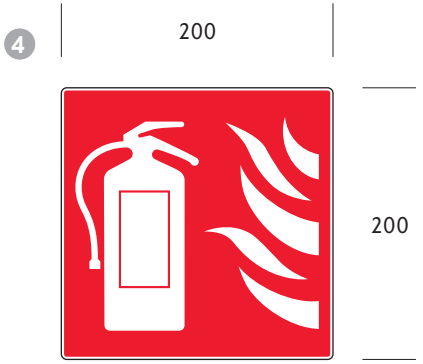
10.15 Fire equipment signs

1. Standard square, illuminated, fire equipment sign. Sign may be single or double-sided, top or side-fixed
2. Standard directional, illuminated, fire equipment sign. Sign may be single or double-sided, top or side-fixed. When hung from a ceiling, signs should have a single suspension strut
3. Standard triangular, illuminated, fire equipment sign, for wall mounting only. This type of sign should not be used in platform areas
4. Standard extinguisher point sign. Unlit flat sign to be fixed to walls over groups of fire extinguishers or fire cabinets where no hydrant or hosereel is present





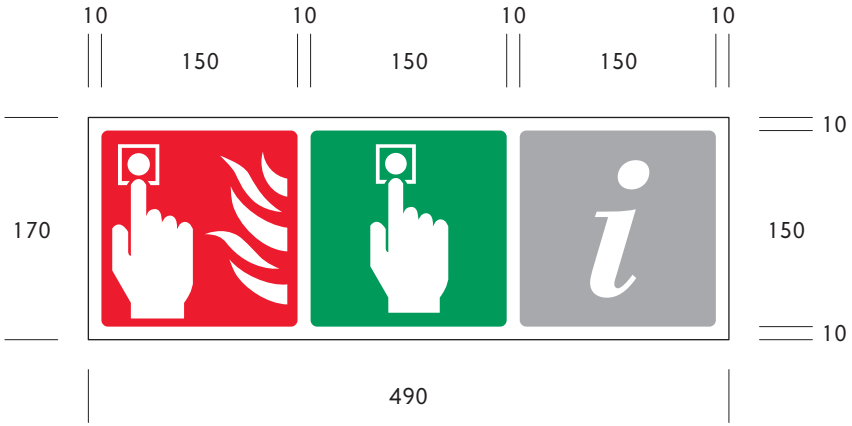


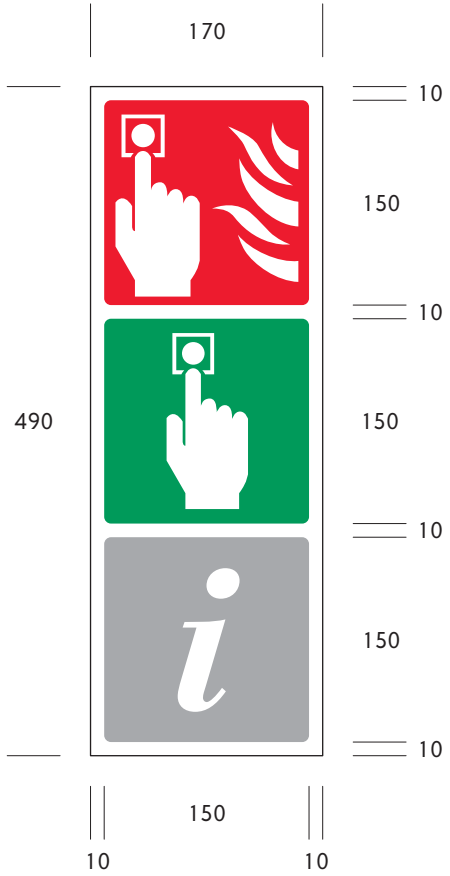


10.16 Help point signs

Passenger ‘Help points’ are fitted at strategic points within all stations, and contain call buttons for Fire, Emergency and Information functions. The unit displays the standard symbols for each function, together with a function/operation description.

‘Help point’ signs indicate the position of passenger help points where they may be difficult for customers to see due to the distance along a platform, or due to other factors obstructing the clear view of the unit. They are not a mandatory item, and where a ‘Help point’ is fixed directly facing customers in close proximity, say in a concourse at the bottom of escalators, signing is not necessary.



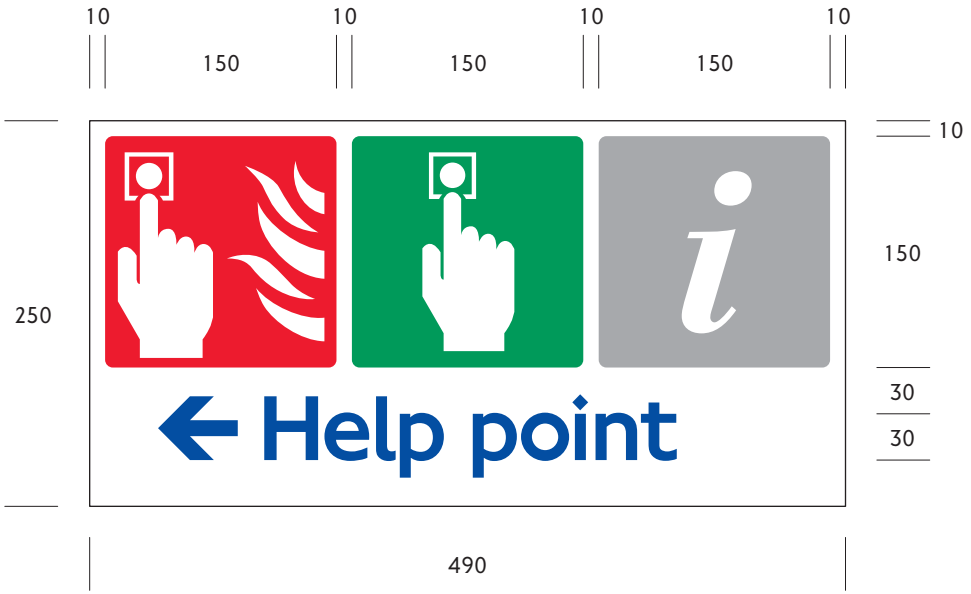


10.16 Help point signs

Where signing is deemed appropriate, the signs should be fitted directly in line with and above the 'Help point' unit, as close to the platform wall as possible.

There are two formats, combining the symbols horizontally or vertically, to best suit viewing and fixing conditions. Where possible, the horizontal version should be used.

If the 'Help point' unit is within a cross-passage, or set well back from the platform wall behind columns, a directional version with arrow and text should be used in place of the sign above (both signs should not be used together).

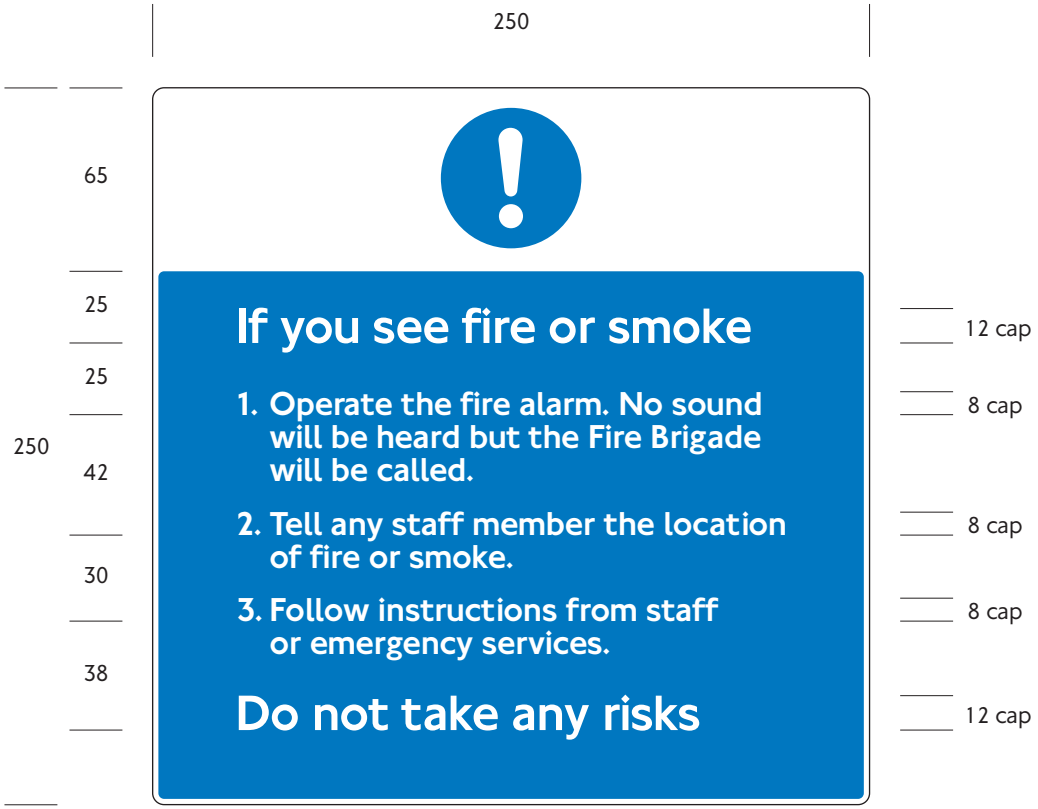


5 radius corners on symbols

Text is centred within panel width

10.16 Help point signs

All ‘Help points’ and fire call points, regardless of how visible, require an additional standard emergency procedure notice (as illustrated), which must be fitted to the wall directly above or adjacent to the unit.



10.17 CCTV signs

Where CCTV is in operation at stations, standard CCTV signs should be fitted at strategic points within the station. They have two primary functions: firstly they reassure customers that they are in a safe and secure environment, and secondly they deter would-be offenders from committing criminal acts such as theft or assault.

There is also a requirement under the Data Protection Act to display clear notices at the entrances to zones under camera surveillance, detailing who is operating the monitoring system, and a contact number for those being recorded to gain access to the recordings, which is their statutory right. Signsmust be concise and display only the elements detailed. As the signsuse a camera pictogram, there is no requirement to state that images are being monitored or recorded.

There are two versions which may be used, depending on how the scheme is being operated (1) The standard version displays the TfL camera pictogram with text and contact number as legally required, the roundel and information symbols being used purely for clarity.

1

2

10.17 CCTV signs

Where schemes are being run on a partnership basis, a second symbol may be used alongside the roundel (dropping the information symbol), supported by the text Working in partnership in LUL typeface. Only one additional symbol should be used, and it must be noted that only one controlling party and contact phone number may be displayed 2

Positioning CCTV signs

The CCTV signs should be fitted at either side of each station entrance, preferably orientated to face customers, or on the entrance sides if there is insufficient space. As well as at station entrances, the signs should be fitted at strategic key points within the station. They should also be fitted on all platforms, on either side of each main exit point from the platform. Within large ticket halls, the signs should also be fitted so as to be clearly visible when passing through the exit gates. They are not required at each camera point, and where additional signs are seen as a requirement, eg due to high crime levels, care should be taken not to use too many signs, as this may lead to the area appearing hostile and increase customer anxiety.

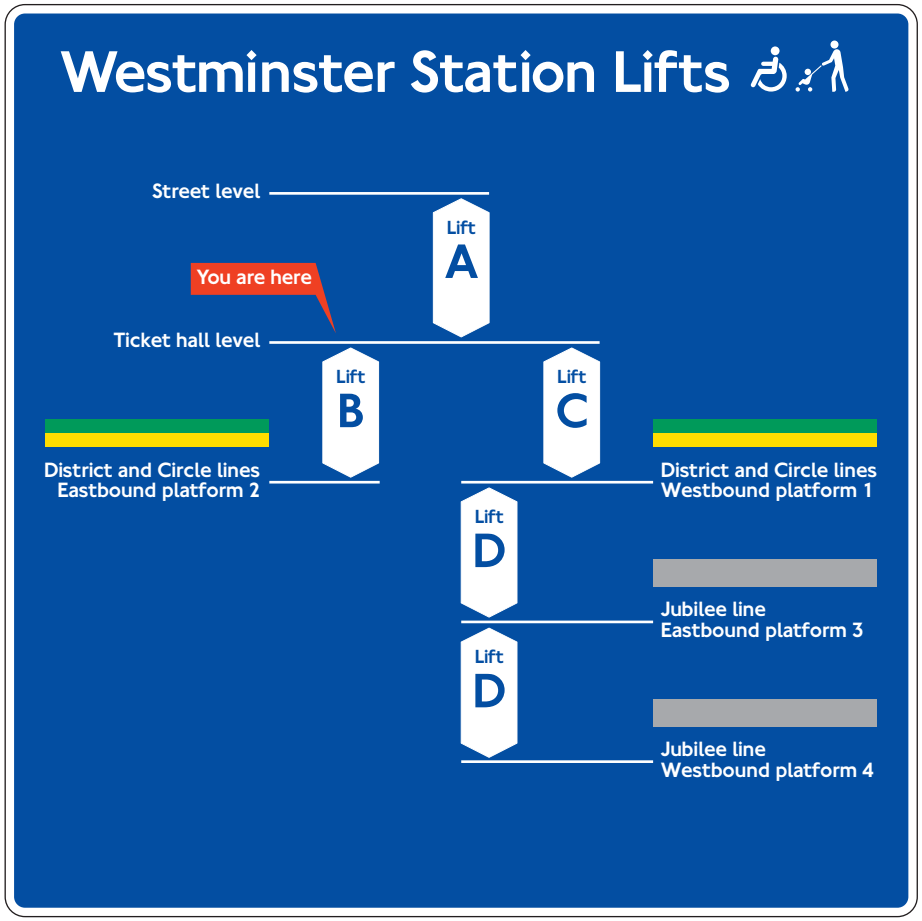
2

10.18 Lift signs

Where stations have several lifts providing level access to more than one line or mode, it is extremely confusing to customers as to which lift to use, whether the lift will take them to their required destination point, or there will be additional lifts to use en route. In such cases a combination of lift coding on primary signs, and schematic diagrams at, and within the lifts, should be used.

1 At the lift call point, the sign should be positioned directly above or adjacent to the lift button and show a 'You are here' indication as shown.

1



10.18 Lift signs

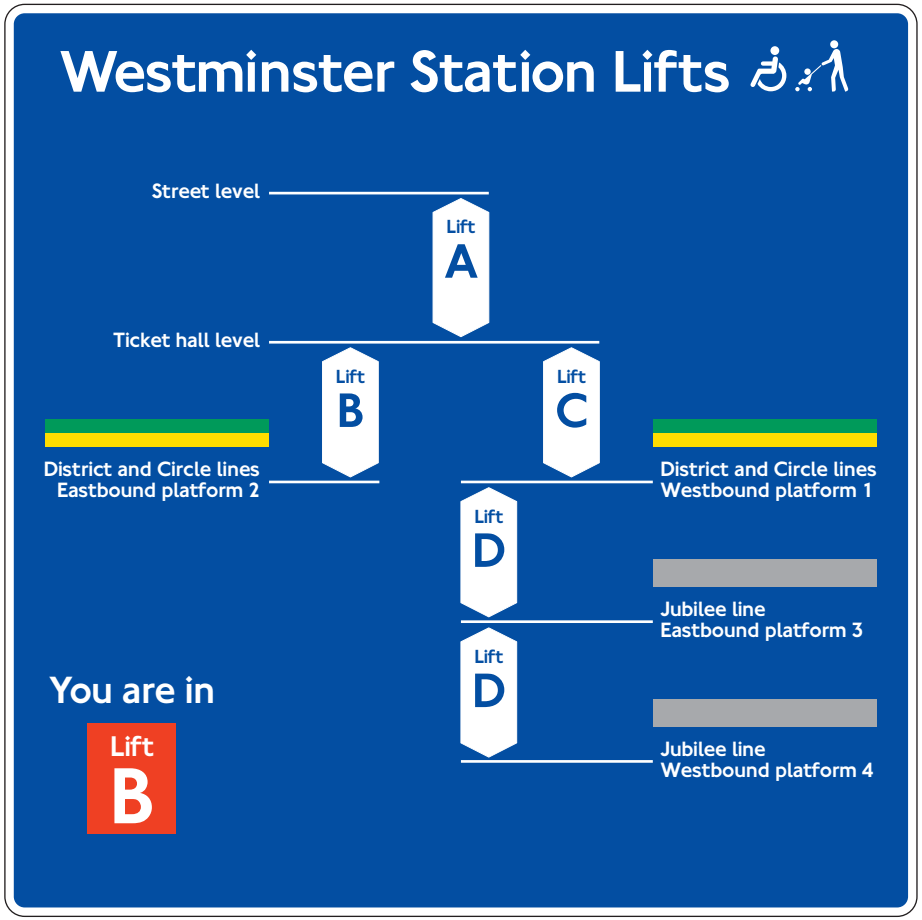
At station with complex lift arrangements.

Lifts should be coded in a logical order top to bottom by letter, as the use of numbers would cause confusion in relation to platform numbers. Primary overhead directional signing displaying the lift symbols and text, should also display the lift code in a reversal white on blue rectangle as shown.

At each lift call point, and within each lift, a supplementary sign should be displayed showing a clear schematic diagram of the station, showing all areas served by lift with the associated lift codes. While the layout of the sign will vary depending on the station layout (any long subways between lifts will need to be clearly shown as such), the signs should always follow a consistent format, with areas labelled in a clear and concise manner. The sign size may also vary, depending on available room and complexity of layout, but should be between 200 and 300mm wide.

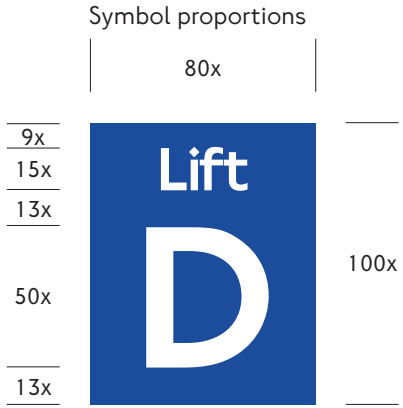
2 Within each lift itself, a similar sign should be positioned directly above or adjacent to the lift buttons, displaying the lift code as shown.

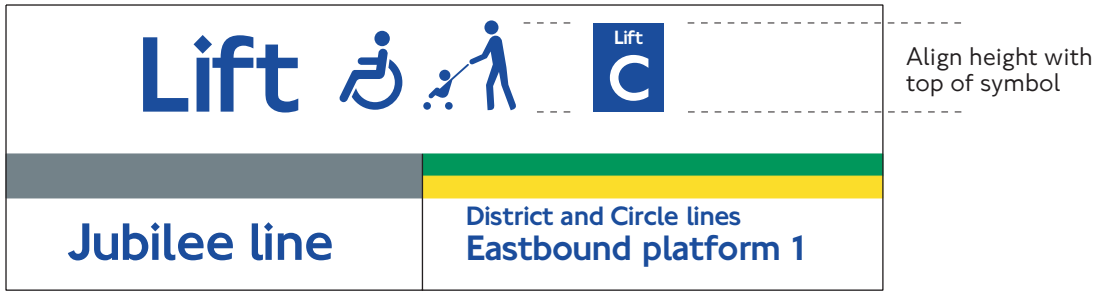
2



10.18 Lift signs

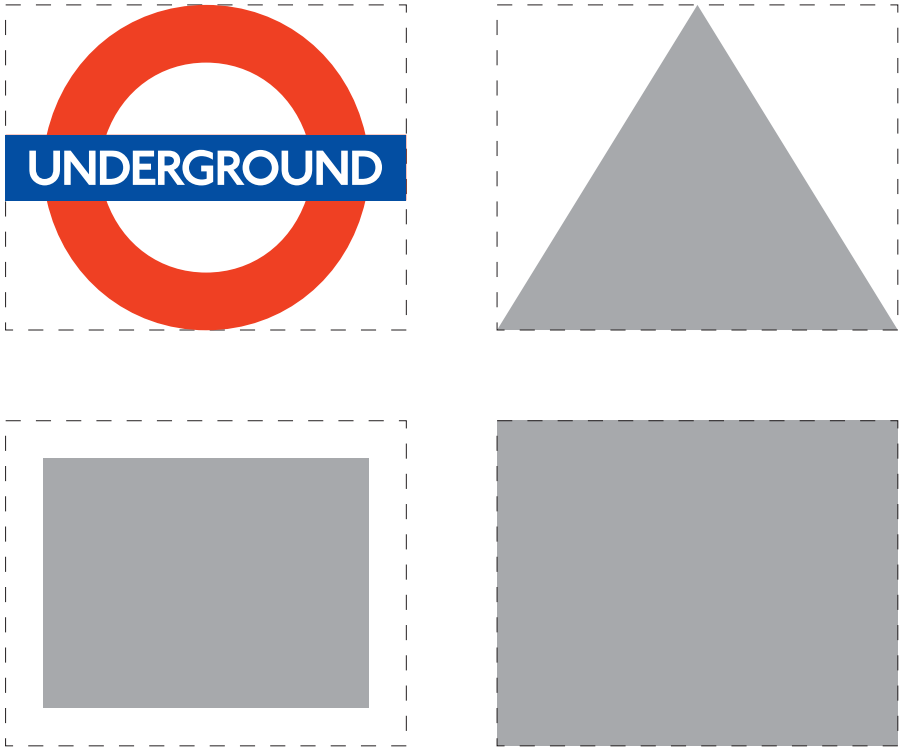
Primary overhead directional signing displaying the lift symbols and text should also display the lift code in a reversal white on blue rectangle as shown.





10.19 Car park signs

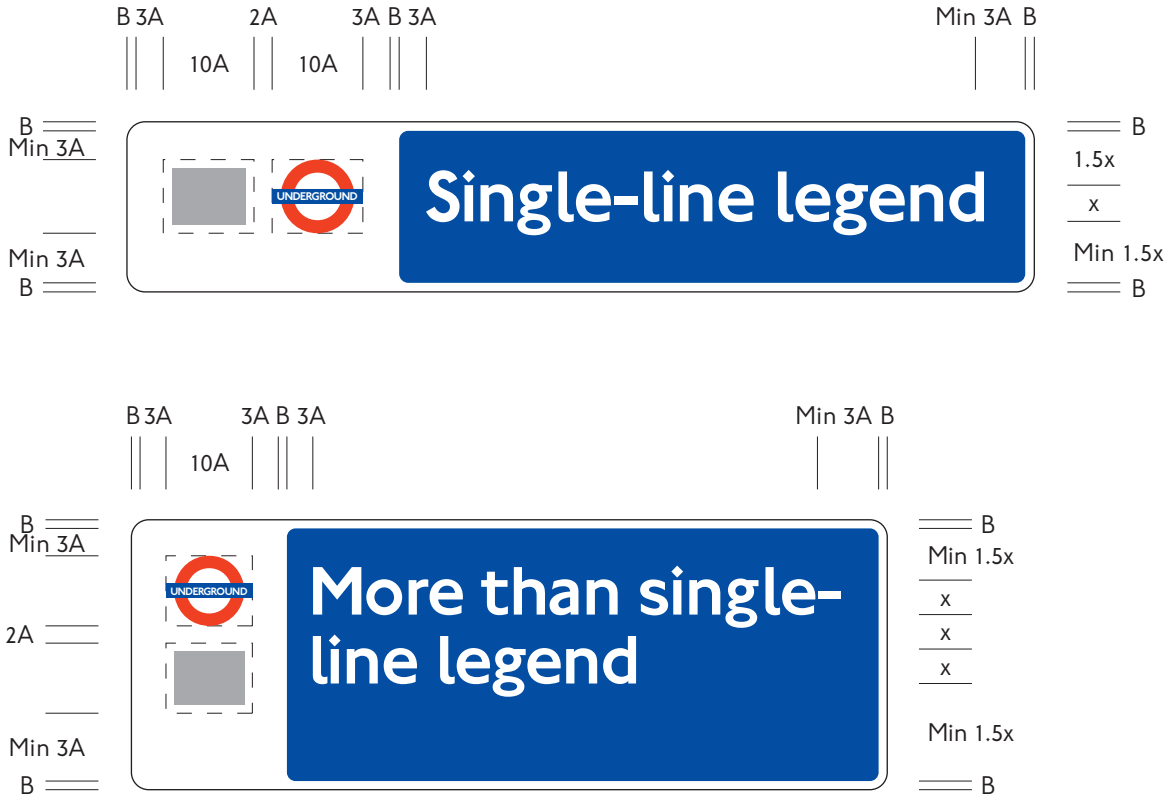
It is current practice for Underground car parks to be managed by outside companies. Car park signs are therefore required to carry company logotypes in addition to the Underground roundel. When combined, the additional logotype should be optically equal to the roundel, as illustrated.



10.19 Car park signs

Only one additional logotype may be combined with the roundel in each car park. A logotype may be combined vertically or horizontally. The roundel should be positioned closest to the sign message, as illustrated. The cap height of the first line of an accompanying message should centre on the depth of the roundel.

For vertical arrangements, the logotype should centre on the width of the roundel bar. For horizontal arrangements, the logotype should centre on the depth of the roundel.



10.19 Car park signs

When used on demarcation or directional signs, the optimum size of the message should be 0.55 times the width of the roundel bar, where possible.

Car park signs follow the same rules as other supplementary and directional signs in terms of colour and layout.

It is usual to display 'Terms and conditions' posters in car parks. These should be designed in accordance with rules for the design of posters, which allow for the use of a smaller roundel. The separate 'London Underground publicity standards' booklet should be referred to when designing posters.

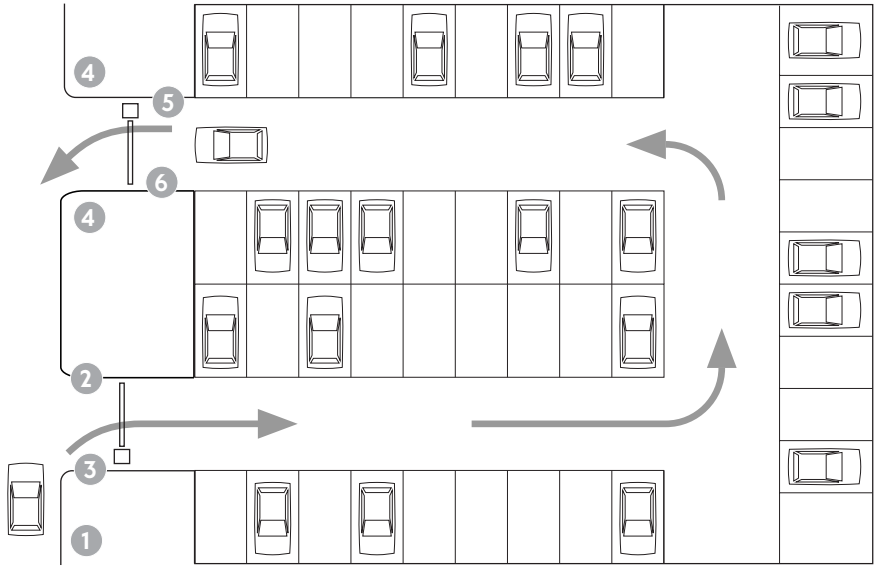
UNDERGROUND
10A
Message
Optimum
5.5A
10A
2A
UNDERGROUND
Message
Lorem ipsum dolor sit amet, consectetur adipscing elit, sed diam nonnumy eiusmod tempor incidunt ut labore et dolore magna aliquam erat volupat. Ut enim ad minimim veniami quis nostrud exercitis nisi ut aliquip ex ea commodo consequat.
Duis autem vel eum irure dolor in reprehenderit in illum dolore eu fugiat nulla pariatur it laboris nisi ctetur adipscing elit, sed diam.At vero eos et accusam et justo odio dignissim qui blandit praesent lupatum delenit aigue duos dolor et molestais exceptur sint occaecat cupidat non provident, simil tempor sunt in culpa qui. officia deserunt mollit anim id est laborum et dolor fugai.
Et harumd dereud facilis est er expedit distinct. Temporem autem quinsud et aur office debit aut tum rerum necessit atib saepe eveniet ut er repudiand sint et molestia non este recusand. Itaque earud rerum hs au aut julla inura autend unanc sunt isti. Lorem ipsum dolor sit amet, religuard on cupiditat, quas nulla praid im umdnat. Improb pary.

10.19 Car park signs

An example station car park is shown to illustrate typical car park signs and their positioning.

Sign example 1 should be noted. This is a directional sign used outside the car park. It follows the rules relating to directional signs, and therefore has a smaller roundel matched to the cap height of the accompanying message.

Requests for further information concerning car park signs should be directed to The Signs Unit.



1

2

3

4

5

6

11.0 Construction

11.1 Primary sign constructions
11.2 Combining sign constructions
11.3 Generic platform roundel details
11.4 Generic external roundel details
11.5 Temporary signs

Sign construction and finishes

The illustrations on the following pages show the main visual features of the primary types of sign used within London Underground station areas. There are separate constructions for external signs and signs fitted to curved surfaces, which are detailed in other sections of this document.

Primary signs

Following these guidelines for primary signs will ensure that signs appear consistent in terms of visual form and build quality. All sign panels should be in vitreous enamel, which has been successfully used on the Underground for several decades, as it has prove the most suitable material for fire, impact and dirt resistance. Illuminated panels within internally illuminated sign faces are toughened glass. Sign panel fixing points and panel access points are concealed, and all corners and edges are radiused for aesthetic and safety reasons.

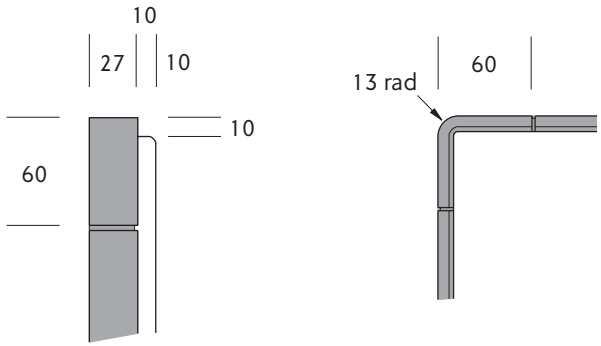
11.1 Primary sign constructions

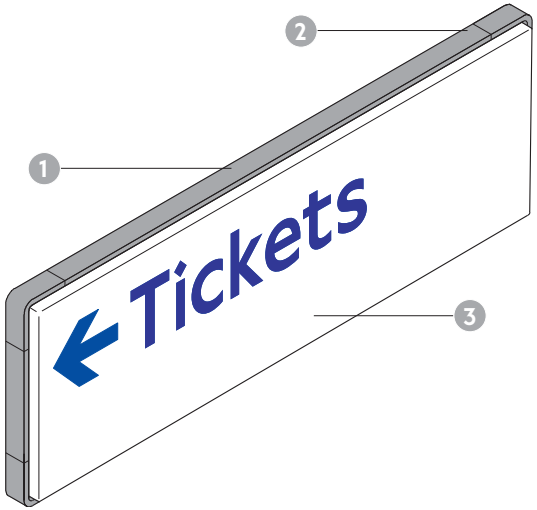
London Underground has developed standard aluminium extrusions and castings for constructing signs which are detailed in the LUL Signs Construction Standards. Signs may be single or double-sided, and may be wall, ceiling or floor-mounted. Where a sign is suspended or free-standing but a message is required on one side only, a double-sided sign construction must be used with a plain white reverse panel.

1. Concealed panel fixings
2. Edge trim coated dark grey finish (30% satin)
3. Vitreous enamel signface with radiused corners
4. Back-lit glass panel

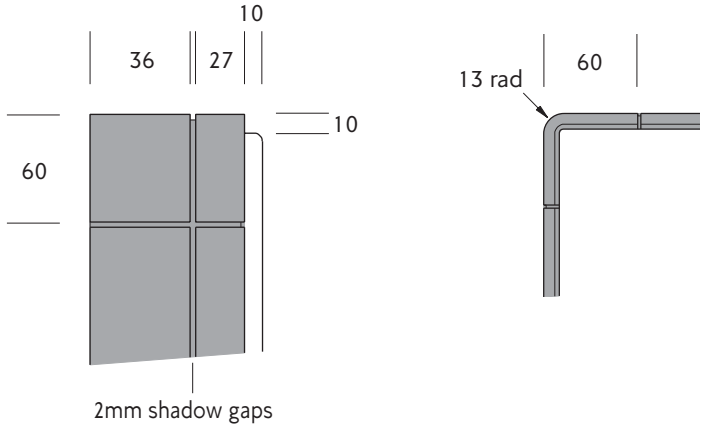
Note: These pages are for visual reference only, and no attempt should be made to construct signs from these illustrations.

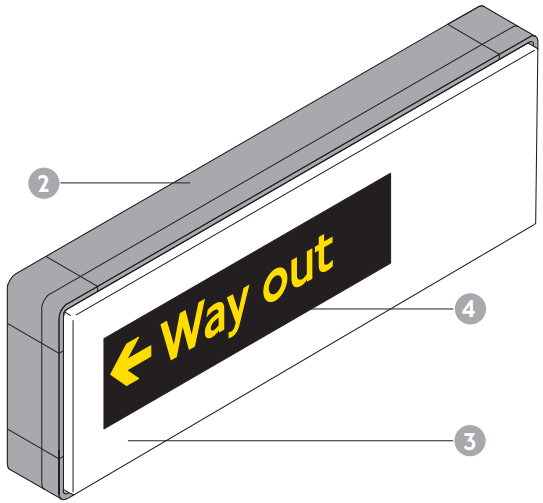
Wall-mounted single-faced non-illuminated





Wall-mounted single-faced illuminated





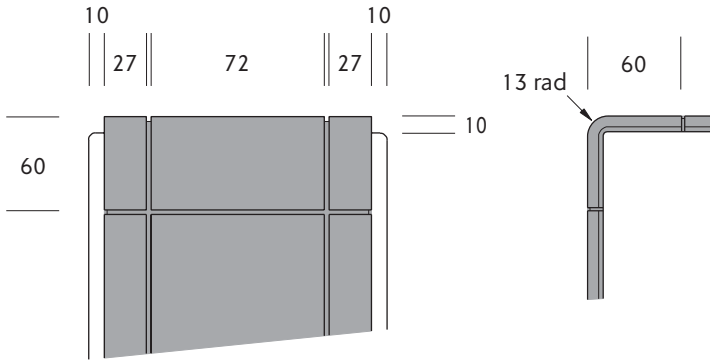
1 of 2

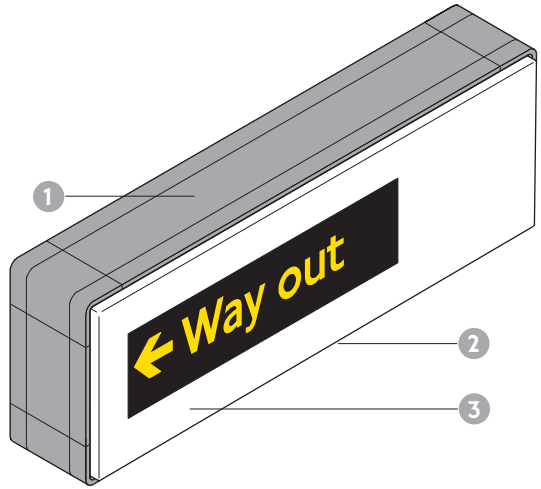
11.1 Primary sign constructions

1. Edge trim coated dark grey finish (30% satin)
2. Vitreous enamel signface with radiused corners
3. Back-lit glass panel

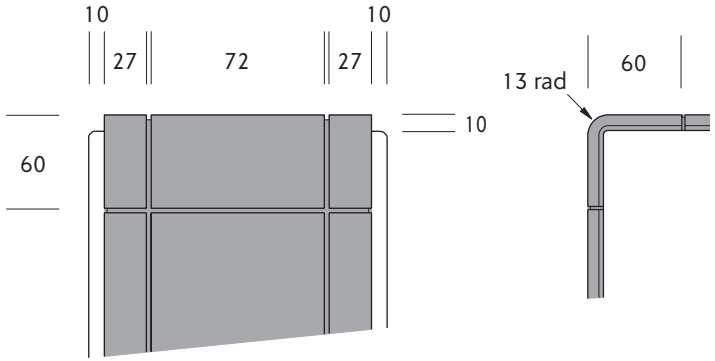
Double-faced signs may be suspended, cantilevered or free-standing.

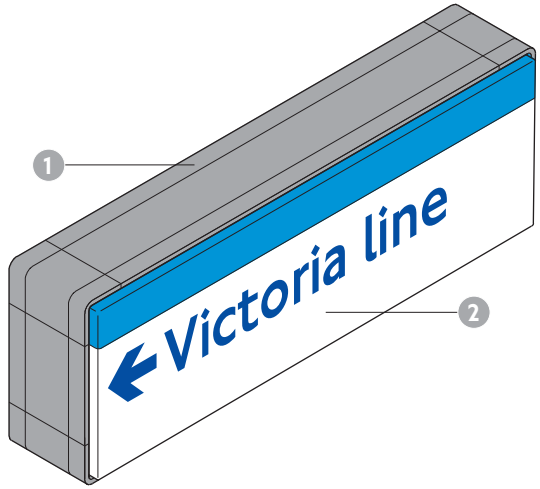
Double-faced illuminated





Double-faced non-illuminated



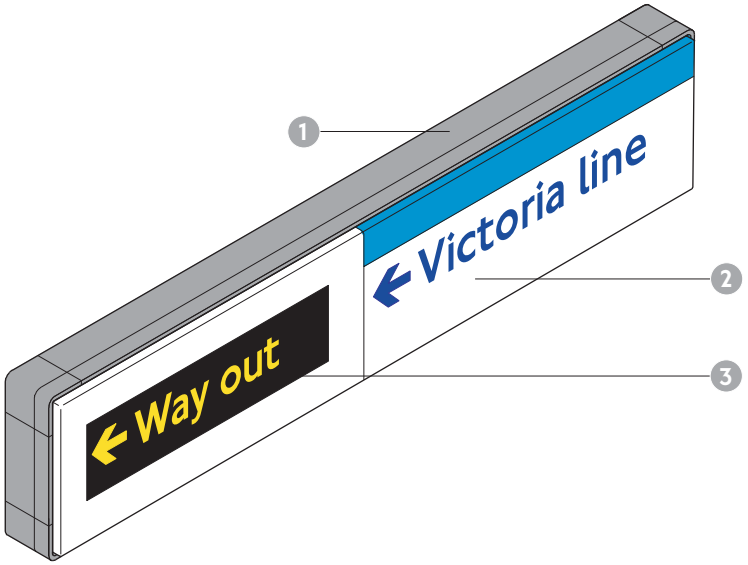


11.2 Combining sign constructions

Directional signs will often comprise several elements, which require different materials and finishes within the same unit. In the example shown, a signface contains both illuminated and unlit sections. As the sign message is permanent, the unlit graphic is fired as part of the vitreous enamel process and an aperture left for the inlaid illuminated glass panel. Where a sign is too long to be constructed as one unit, the vitreous enamel face panels of unlit sections must appear flush with the illuminated signface panel, by using an illuminated sign shell without the internal illumination.

Fixed permanent sign message

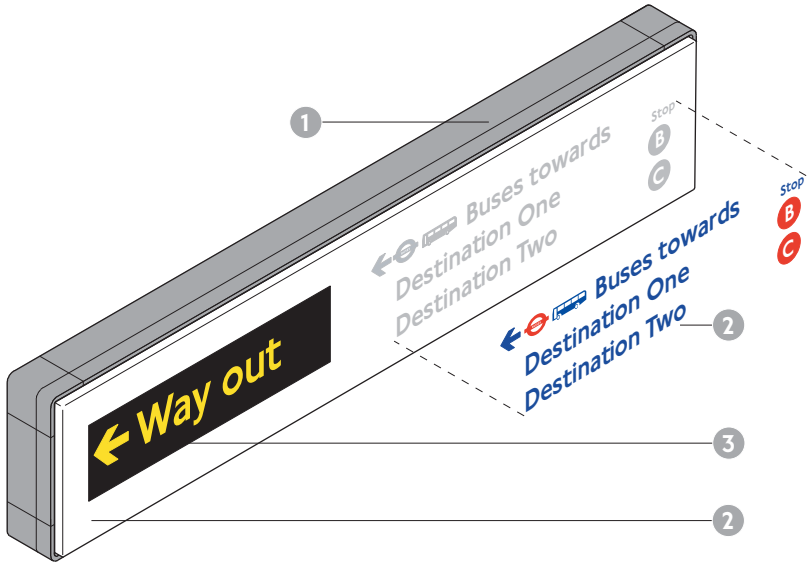
1. Edge trim coated dark grey finish (30% satin)
2. Vitreous enamel signface with radiused corners
3. Black-lit glass panel



11.2 Combining sign constructions

Where a sign is in a permanent position, but contains information which may change periodically, eg bus stops or local attractions, this information must not be fired as part of the enamelling process, but applied to the white enamel after firing. This will ensure that when changes occur, the sign can be amended in a professional manner, without using overlays. This is carried out using external grade cut vinyl in the correct colours, and when applied correctly is indistinguishable from the fired graphic. Where possible, such signs must be fitted at a height greater than 2.3m from floor level, to avoid tampering. Any vinyl graphics applied with a white background are not acceptable as an amendment to permanent signing, and must be replaced.

Note: Vinyl is perfectly compliant under Section 12 Fire-Safety Regulations for permanent signing, provided the quantity used is in line with LUL Building Control Group Standards.



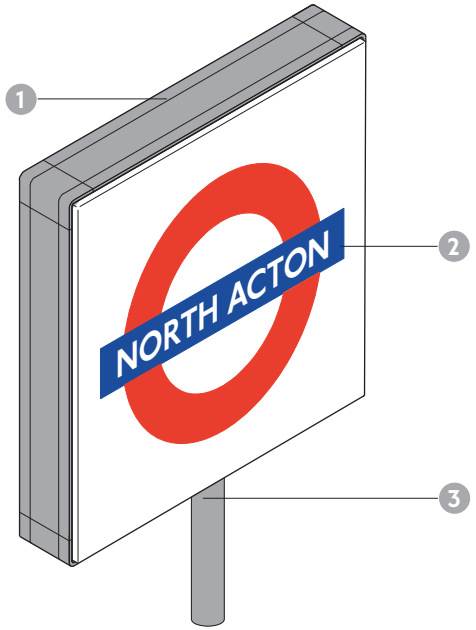
Message subject to periodic change

1. Edge trim coated dark grey finish (30% satin)
2. Cut pre-spaced exterior grade vinyl applied to vitreous face
3. Black-lit glass panel
4. Plain white vitreous enamel signface

11.3 Generic platform roundel details

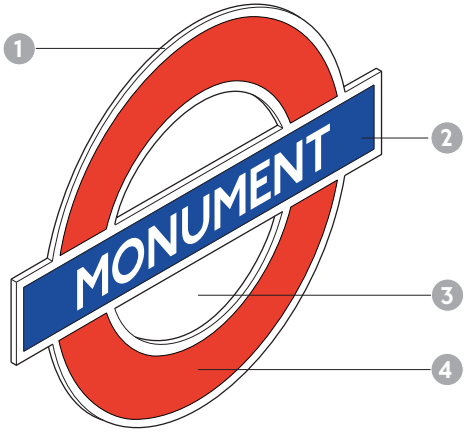
Platform panel roundel (double-sided version)

1. Edge trim coated dark grey finish (30% satin)
2. Vitreous enamel signface with radiused corners
3. Support coated dark grey finish (30% satin)



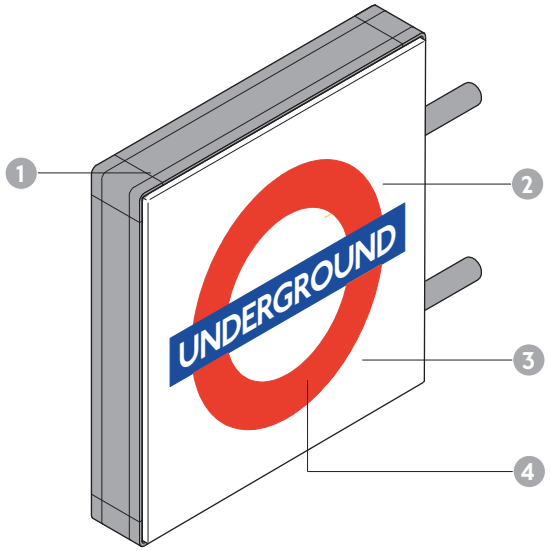
Platform silhouette roundel

1. Rebated metal frame retaining vitreous panels. Bronze/aluminium finish
2. Flat vitreous enamel station name panel
3. Open centres
4. Flat vitreous enamel red ring sections



11.4 Generic external roundel details

While there are several different types of external roundel sign, including silhouette roundels and interchange totem signs, the same basic principles in terms of materials and finishes apply as detailed on this page. Due to the shape of the signs and panel apertures, vitreous enamel is unsuitable for use due to distortion problems. Signs are of an aluminium construction with all illuminated sections in acrylic. Glass should not be used for such signs due to safety, vandalism and colour matching issues.



External panel roundel (cantilevered version)

1. Edge trim coated dark grey finish (30% satin)
2. White powder coated aluminium sign face, with roundel cut out
3. Inlaid back-lit acrylic symbol 028 acrylic with translucent vinyl applied to front face: Underground red 3M – 230/33. Underground dark blue 3M – 230/87
4. White aluminium centres

External silhouette roundel

1. Edge trim finish dependent on architectural considerations (bronze or silver)
2. Inlaid back-lit acrylic bar 028 acrylic with translucent vinyl applied to front face: Underground dark blue – 3M 230/87
3. Open centres
4. Inlaid back-lit acrylic ring panels 028 acrylic with translucent vinyl applied to front face: Underground red – 3M 230/33

11.5 Temporary signs

Temporary signs should obey the same rules concerning layout, colouring and style as permanent signs.

For further details refer to LUL Station Presentation handbook.

12.0 Fixing guidelines

12.1 Directional signs
12.2 Supplementary signs
12.3 Incorporating signs within finishes

Sign positioning considerations

Positioning signs is essential to any information system. The previous sections of this document cover the sequence, size and orientation of signs, but care must also be taken to ensure that signs are co-ordinated with the station architecture and environment, without blending into their surroundings and losing their primary function.

12.1 Directional signs

Directional signing

Primary directional signs in a given station should ideally be of a constant depth and fixed at a consistent height. Where signs are added to an existing installation, care must be taken to note the height, panel and type sizes of existing signs, to enable the additional signing to be added in a consistent manner.

Where stations have large open areas, signs should be enlarged in keeping with the scale of their surroundings, without appearing garish, using over-large lettering for the viewing distance. Similarly, where the sign viewing distance to a large wall area is short, due to a change in subway direction, the sign should be fitted so as to appear legible but not overpowering.

Signs should be fitted symmetrically to subways and over escalators, unless specific passenger flows are to be highlighted, and where they are marking the positions of cross- passages, they should be aligned on the centre point of the cross-passage.

Where columns are present, directional signs should not be fitted so as to block or obscure the column, which would look particularly unsightly from the reverse face, but should be placed equidistantly between columns, aligned with the column centres.

If wall-mounted signs are fitted over a run of information posters, ticket machines or as a frieze panel, the sign must be of a matching length to the elements being headed, using extended infill panels if required.

Fixing heights

In areas where signs are suspended from ceilings, they should be fitted at an optimum viewing height of 2.7m to the underside.
If ceilings are at a very high level, extended fixings or alternative mountings should be sought to avoid signs being lost in the ceiling void.

Where signs are fitted tight to suspended ceilings, they should not span lighting runs, where reflected light may render the signing illegible, and cause lighting maintenance problems.

For wall-mounted signing, an optimum datum level of 2m from floor level to the top edge of the sign should be used, which should also be adhered to for supplementary signs and poster frames. This will ensure that the sign message, or the sign header, is clearly visible even in a crowded area.

Lighting

Great care should be taken when positioning lighting in relation to signing within all station areas. This is particularly important where energy-saving downlighters are adopted as the primary lighting source, as this can leave areas of the ceiling in relative darkness. All externally illuminated signs shall be illuminated so as to have a luminance of 100 lux with a maximum variation in luminance of 10% across the face of the sign. Where this cannot be achieved by the normal station lighting installation, dedicated additional lighting must be provided. Where possible, signs should not be fitted close to lighting fittings so as to cast shadows on wall areas.

All electrical feeds to illuminated signs must be as discreet as possible, and any conduit should be buried beneath the wall finish entering the sign through the back.
For full details of electrical requirements for signs refer to LUL's Engineering Standards.

12.2 Supplementary signs

Positioning supplementary signs

Particular care must be taken when positioning supplementary signs, as there are many different messages which must be placed in a variety of situations. It must be noted that too many signs can be just as confusing as too few, and that one carefully positioned sign is more effective than several haphazardly positioned signs. Where a notice prohibiting a particular behaviour is clearly displayed, the addition of further notices in the same area is unlikely to deter persistent offenders.

As with directional signs and posters, the top edge of supplementary signs should be 2m above floor level. However, if there are other elements present which do not conform, this distance may be adjusted to suit. If signs are to be fitted to columns, they should be central to the column width. Where signs are being fitted to tiled walls, the signs should be centrally aligned horizontally and vertically with the tiles or tile joints, and should be bonded wherever possible to avoid tile damage.

In passageways, supplementary signs should face the directional flow of customers, as signs fixed to the side walls are far less effective in areas of heavy passenger flow. Where there are several supplementary signs in a given area, these should not be fitted adjacent to one another unless they are of identical size and format, in which case a minimum gap of 50mm should be adopted. Supplementary signs should never obscure, or be attached to directional signs or poster frames.

'No smoking' signs

London Underground was one of the first public transport systems to introduce a no smoking policy, which at the time required a publicity campaign and comprehensive application of signs in all areas to be effective. Several years on, there is still a need for such signs, but to a far lesser extent. While the requirement for such signs may vary at individual locations, the following principles should be noted:

From any area on a station at least one 'No smoking' sign should be clearly visible, for the policy to be effectively policed by staff.

Additional signing will normally be required in the following areas:

- Facing customers at the immediate entry point to a station
- Facing customers at the exit point from the outward ticket gates
- Within subways leading from ticket hall to street
- Along open platforms, particularly where rail services are also served
- On underground platforms, 'No smoking' signs should be fitted to the trackside walls, directly above every other trackside roundel
- At all platform exit points, 'No smoking' signs should be fitted to the cross-passage side walls, facing customers as they turn into the passage
- 'No smoking' signing is vital on station escalators, but this should be incorporated within the standard escalator notices (refer to section 10.10)

'No smoking' signs should not be fitted to doors within station areas where both the room and the area outside are no smoking zones.

12.3 Incorporating signs within finishes

Incorporating signing within finishes

The incorporation of signing within wall finishes, such as vitreous enamel, can be an extremely cost-effective and attractive method of signing, which has been used successfully at several key locations. Primary directional and station identification signing can be incorporated in wall finishes, providing the following criteria are satisfied:

- Signs must be in the optimum operational position and orientation. Platform roundel and frieze elements must be positioned at the correct height (refer to Platform signing section 5.0).
- Sign graphics must fully comply with signing layout standards, as detailed within this document. The white background is an integral part of the graphic standards.
- Sign surface must not be distorted in any way which will unduly affect the appearance of the sign layout, eg tight radius.
- All colours must be an accurate representation of LUL standard colours and be totally resistant to deterioration. Stylised etched-glass colour variations are not acceptable.
- Standard element sizes must not be expanded to suit cladding modules or reduced from standards.
- Panel joints must not be present within sign layouts, apart from graphic breaks which would normally be marked using a grey line.
- For panels which are larger than standard, colour bands, grey lines or any element reaching the edge of a standard panel must be extended to the entire panel width.
- Any panel layout deviating from these standards in terms of size or graphic alignment must be approved by LUL prior to panel manufacture.
- Where signing elements may be subject to change within five years, eg an interchange logo on a line diagram, the panel must be able to be easily replaced at a cost comparable with a separate sign.
- The material used must be at least as effective as vitreous enamel in terms of vandal and graffiti resistance.

Index

Basic elements

1.0 Basic elements

1.1 Roundel
1.1.1 Background areas
1.1.2 Roundel silhouette
1.1.3 Background colours
1.2 Colour
1.3 Lettering
1.3.1 Standard sizes and colours
1.3.2 Viewing distance chart
1.3.3 Line spacing
1.4 Fitting messages onto panels
1.5 Arrows and their direction
1.5.1 Arrows
1.5.2 Placement of arrows
1.6 Symbols and pictograms
1.7 Way out
1.8 Restricted sign layouts
1.9 Signing for mobility-impaired customers
1.10 Headroom restrictions
1.11 Switchable signs
1.12 Panel sizes
1.13 Combining signs and minimum height
1.14 Combining signs and layout details

The customer journey

2.0 External signage

2.1 Examples
2.2 Elements
2.3 Panel version principles
2.4 Pole-mounted silhouette version
2.5 Wall-mounted silhouette version
2.6 Fascia principles
2.6.1 Lettering sizes
2.6.2 Position of lettering
2.7 Positioning of signs
2.8 Shared facilities
2.9 Heritage stations

3.0 Ticket hall signing

3.1 Entering a ticket hall
3.2 Ticket machines
3.3 Ticket window signs
3.4 Information posters unit
3.5 Dedicated gateline
3.6 Ticket gate penalty warning signs
3.7 Gateline signing
3.8 Lift signing

4.0 Platform finding

4.1 Ticket hall to platform
4.2 Order of information
4.3 Sign progression
4.4 Line diagrams
4.4.1 Line diagrams – layout details
4.5 Platform bifurcation
4.6 Emphasis of information
4.7 Key destinations
4.8 Platform confirmation
4.8.1 Platform confirmation – numbers
4.9 Special cases
4.10 Train indicators

5.0 Platform signing

5.1 Station identification from train
5.2 Basic platform roundel considerations
5.3 Platform and trackside roundel sizes
5.3.1 Frequency/height
5.4 Station name sizes
5.5 Types of platform roundel
5.6 Roundel clearance
5.6.1 Restricted roundel sizes
5.7 Existing silhouette roundels

Index

5.8 Frieze – basic considerations
5.8.1 Frieze – appearance
5.8.2 Incorporating frieze within trucking
5.9 Interchange information along platforms
5.9.1 Interchange and exit information
5.9.2 Interchange terminology

6.0 Exit from platform

6.1 Way out from platform
6.2 Way out from platform – Principles
6.3 Directing to several cross-passages
6.4 Directions to lifts
6.5 Platform to ticket hall
6.6 Maintaining clear sightlines

7.0 Emergency exits

7.1 Regulations
7.2 Pictograms
7.3 Types of emergency sign
7.4 Combining signs
7.5 Emergency exits for wheelchair users
7.6 Switchable exit signs
7.7 'No entry' signs
7.8 Special cases

8.0 Exit from station

8.1 Exit from station
8.1.1 Multi-exit stations
8.2 Exit guide layout principles
8.3 Signing to bus stops

Specific elements

9.0 Safety signs

9.1 Safety signs overview
9.2 Fire safety signs
9.3 Prohibition signs
9.4 Warning signs
9.5 Safe condition signs
9.6 Mandatory signs

10.0 Supplementary signs

10.1 Supplementary signs
10.2 Sign wording
10.3 Panel sizes
10.4 Typeface
10.5 Type size and emphasis
10.6 Line spacing
10.7 Borders
10.8 Margins
10.9 Margins on signs with pictograms
10.10 Combining signs
10.11 Door signs
10.12 Rendezvous points and assembly points
10.13 Fixing of sign panels
10.14 Emergency – Do not enter
10.15 Fire equipment signs
10.16 'Help point' signs
10.17 CCTV signs
10.18 Lift signs
10.19 Car park signs

11.0 Construction

11.1 Primary sign constructions
11.2 Combining sign constructions
11.3 Generic platform roundel details
11.4 Generic external roundel details
11.5 Temporary signs

12.0 Fixing guideline

12.1 Directional signs
12.2 Supplementary signs
12.3 Incorporating signs within finishes